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FIRST
ILLINOIS FARM FLASH

(From the U. S. Department of Agriculture
(and Extension Service in Agriculture and
(Home Economics, College of Agriculture,
(University of Illinois

THE LIBRARY OF THE
APR 8 1943
UNIVERSITY OF ILLINOIS

Speaking time: 6 minutes

January 4, 1943

(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: Here again is the ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

For want of a bolt the planter was lost, for want of a planter the crop was lost, for want of a crop a war was lost, is the 1943 version of an old adage, in the opinion of R. I. Shawl, agricultural engineer. Instead of a bolt it may be a bearing, belt, chain, gear or a washer. But whatever it is, it can throw your whole production program out of line if you can't get it when you want it.

So let's check our repair parts now and order them early, Shawl says. They won't be plentiful at all times. Your older machines which you would normally junk or trade must be kept going. That will take more repair parts than usual. Then, too, your repair shops will have an increasingly heavy demand for their services this year.

On FARM MOBILIZATION DAY, Tuesday, January 12, Illinois farmers will be provided with a check list for their convenience in preventing breakdowns in farm and home equipment for 1943. They can circle the parts needed, detach the page and take it to their dealer right away. This is all part of the wartime program for production which farmers are carrying out in cooperation with the extension service of the University of Illinois College of Agriculture.

In addition, schools on repair and adjustment of farm machinery are being given in many communities this winter. Farmers

ANNOUNCEMENT: Here again is the ILLINOIS FARM FLASH, a semi-regular publication presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

For want of a bolt the shifter was lost, for want of a pin the engine was lost, for want of a drop a war was lost, is the 1945 version of an old adage, in the opinion of R. L. Shaw, agricultural engineer. If a bolt it may be a bearing, belt, chain, gear or a washer. However it is, it can throw your whole production program out of gear if you can't get it when you want it.

So let's check our repair parts now and order them early. They won't be plentiful at all times. Your older machinery you would normally junk or trade must be kept going. That will require more repair parts than usual. Then, too, your repair shops will be increasingly busy because for their services this year.

On FARM MOBILIZATION DAY, Tuesday, January 12, Illinois will be provided with a check list for their convenience in making breakdowns in farm and home equipment for 1945. They can get the parts needed, detach the page and take it to their dealer. This is all part of the wartime program for production. Farmers are carrying out in cooperation with the extension service, University of Illinois College of Agriculture.

In addition, schools of repair and adjustment of farm

are urged to enroll in one of them. For further particulars, consult your farm adviser, vocational agriculture teacher or implement dealer.

As we start the New Year, let's all resolve to do something about safety. That's the suggestion which comes to us from E. W. Lehmann, head of the department of agricultural engineering at the University of Illinois College of Agriculture. Accidents and fires have destroyed more lives and property and the tragedy of it has struck more homes, farms and factories than the losses caused by the war in the same period of time. Let's work together to make the farm and rural home a safer place to work and live by eliminating accident and fire hazards.

The farm labor situation will come in for its share of the discussion on FARM MOBILIZATION DAY, Tuesday, January 12. Will there be enough labor in your school district? On which farms is it likely that production will be reduced by a shortage of labor? How many farmer in your district will use city boys and girls? These are just a few of the questions to be answered on "M" day. You see, they're questions that concern what is to go on "in our own back yard," so to speak, in the way of labor for 1943 production.

While legislation can help solve the farm labor problem, it can't do the job alone. Farmers in a single community will need to support and take part in such programs for labor placement as the county farm-labor committee may develop.

Sometimes a small group of farmers can join in hiring a married man who will divide his time between the farms and be assured of full-time employment. This is one time when we can work out some

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arrangement to keep what farm labor we have for 12 months out of the year instead of only during the peak season. Maybe it's a case of pooling labor and machines to meet the tremendous production goals which now face us.

Whatever our farm labor problem may be, perhaps we shall be able to find a solution in the discussions on "M" day, Tuesday, January 12.

We can raise more pigs with the same equipment, in the opinion of E. T. Robbins, livestock extension specialist, University of Illinois College of Agriculture. The problem of furnishing shelter for more spring pigs this year, Robbins says, has already been solved on some farms without additional investment. Swine equipment has been kept occupied most of the year.

For example, Frank L. Stout, of Sangamon county, has eight double hog houses to accommodate 16 sows and their litters at one time. He has about 50 sows farrow in three groups in February, March and April. Sows weaning large litters the first two months are also bred to raise September pigs. He raises three times as many spring litters as his farrowing pens will hold. The early pigs are moved to the fields, with sheds for shelter, to make room for the next group of litters.

Arthur Engel, of Woodford county, has been using a similar plan to raise February, March, July and September pigs. This way he makes nearly continuous use of his equipment.

In Morgan county, Burrus Brothers, have pigs farrowed in January, March, June and July in order to keep their 50 A-shaped field houses occupied most of the time.

In Iroquois county, John B. Rice has 12 small field houses which he uses in conjunction with a central hog house and empty horse stalls to farrow February, June, August, and December pigs. He raises four times as many pigs as he can accommodate at one time.

Using such methods to increase the effectiveness of farrowing houses will enable Illinois farmers to reach the 15 per cent increase in pig production called for in the 1943 goals, Robbins says. He adds that a low open-front shed is suitable for a large drove of pigs in winter, and that trees, a high hedge or an artificial shade are adequate protection for weaned pigs in summer.

Meet the Murray family, friends of Rochester, Illinois. Under adverse circumstances they did more than their share in contributing to the food-for-freedom program in 1942, thanks to the Farm Security Administration.

Ill for the past several years and unable to work in town, Murray moved with his family to a 40-acre farm. The FSA loaned them enough money to buy their livestock, three cows, three bred gilts and 500 baby chicks. But they paid off the loan at the end of the first year from the sales of hogs and soybeans and are now debt free and ready to continue on the increased production goals in 1943.

Let's take a brief look at their 1942 production record. Three veal calves, 17 shoats, 456 pounds of butter, 3,800 dozen eggs and 300 pounds of poultry. That doesn't include what the Murray's kept for their own use. In addition, there were 400 quarts of fruit and vegetables canned, 18 bushels of Irish potatoes and four bushels of sweet potatoes stored in cellar bins.

If we can have a few more Murray's in 1943, it's "curtains" for Hitler and his henchmen.

It's the small herds and family cows that will help meet our national goal of 120 billion pounds of milk in 1943, says E. E. Ormiston of the dairy department, University of Illinois College of Agriculture. Only about one-third of the dairy cows in this country are found in herds of 11 cows or more, and Illinois is no exception.

Larger dairymen are taking rather good care of their cows. They can't afford to neglect a major source of their income. But all too frequently the small herds are neglected, Ormiston points out. Neglect of these cows has the same effect on production of food as does a slow-down strike on the output of a factory.

On many farms production is low simply because the cows don't get enough feed to support high production. Information on the best feeding practices for dairy cattle will be included in the discussions at the next series of wartime educational meetings for agriculture. Consult your farm adviser for dates and places.

CLOSING ANNOUNCEMENT: That concludes today's ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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SECOND (From the U. S. Department of Agriculture
ILLINOIS FARM FLASH (and Extension Service in Agriculture and
(Home Economics, College of Agriculture,
(University of Illinois

Speaking time: 4½ minutes

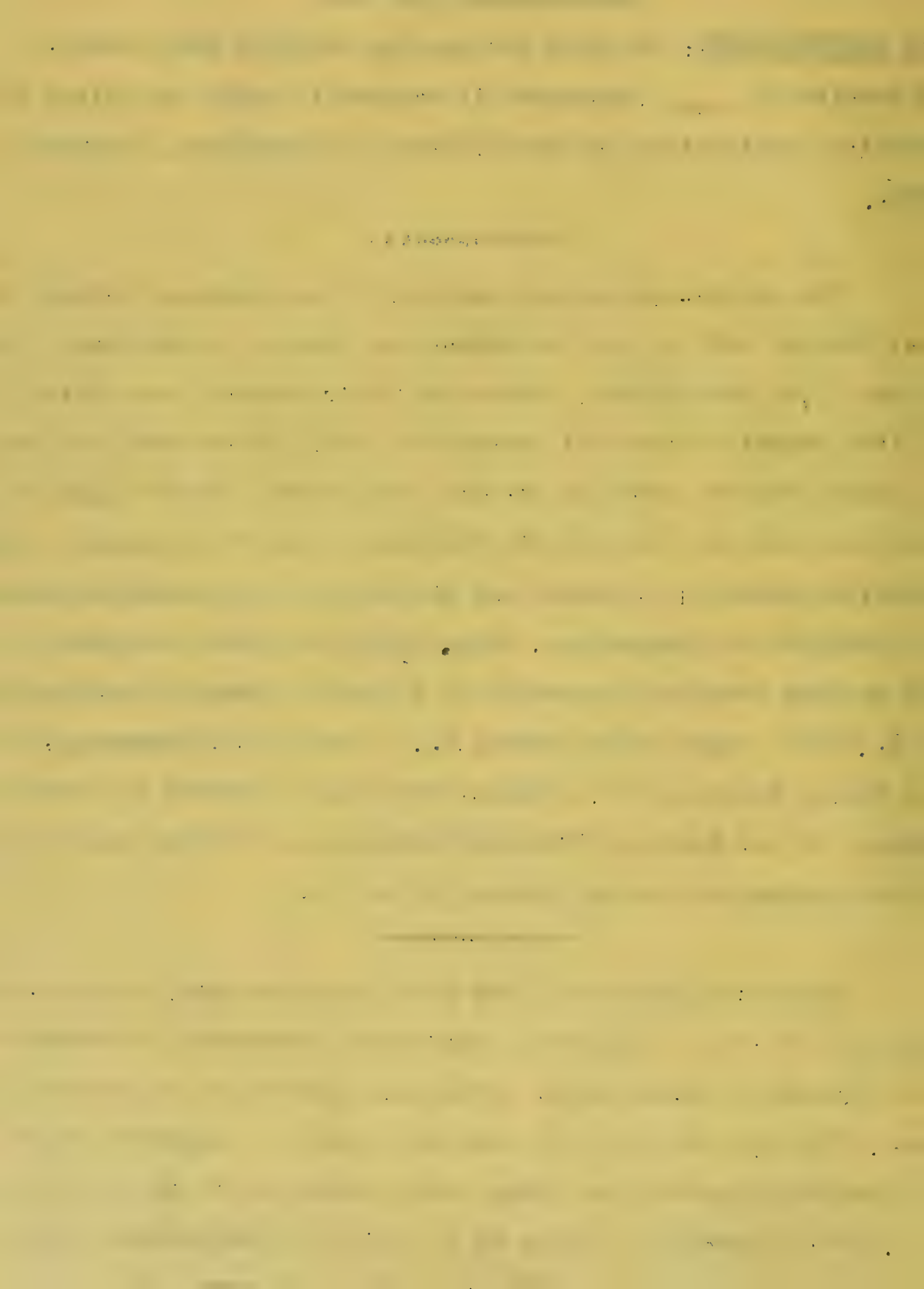
January 7, 1943

(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: We bring you now the ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

The sixty-ninth annual meeting of the Southern Illinois Horticultural Society will be held on Monday and Tuesday of next week, January 11 and 12, at Carbondale. Members of this branch of one of America's oldest farm organizations will assemble at that time to work out some of the fruit growers' problems for the 1943 season. Such things as gasoline and fuel oil rationing in relation to the fruit grower, labor, marketing, the control of insects and disease and the materials situation will be subjects of discussion. Among those scheduled to appear on the two-day program from the University of Illinois College of Agriculture are W. P. Flint, chief entomologist, R. V. Lott, H. W. Anderson, Dwight Powell, Dillon Brown and V. W. Kelley from the department of horticulture. All members of the Southern Illinois Horticultural Society are urged to attend the Carbondale meeting January 11 and 12.

Practicing safety in 1943 is a patriotic duty, says E. W. Lehmann, head of the agricultural engineering department, University of Illinois College of Agriculture. Of course, safety is an individual problem. It's just as important that each child be taught to avoid accidents by removing hazards and doing things safely as it is for the grown person. It's a good idea to make it a point to teach children always to put their toys after they've finished playing with them. Serious falls have been caused by playthings left on floors, stairways or walks.



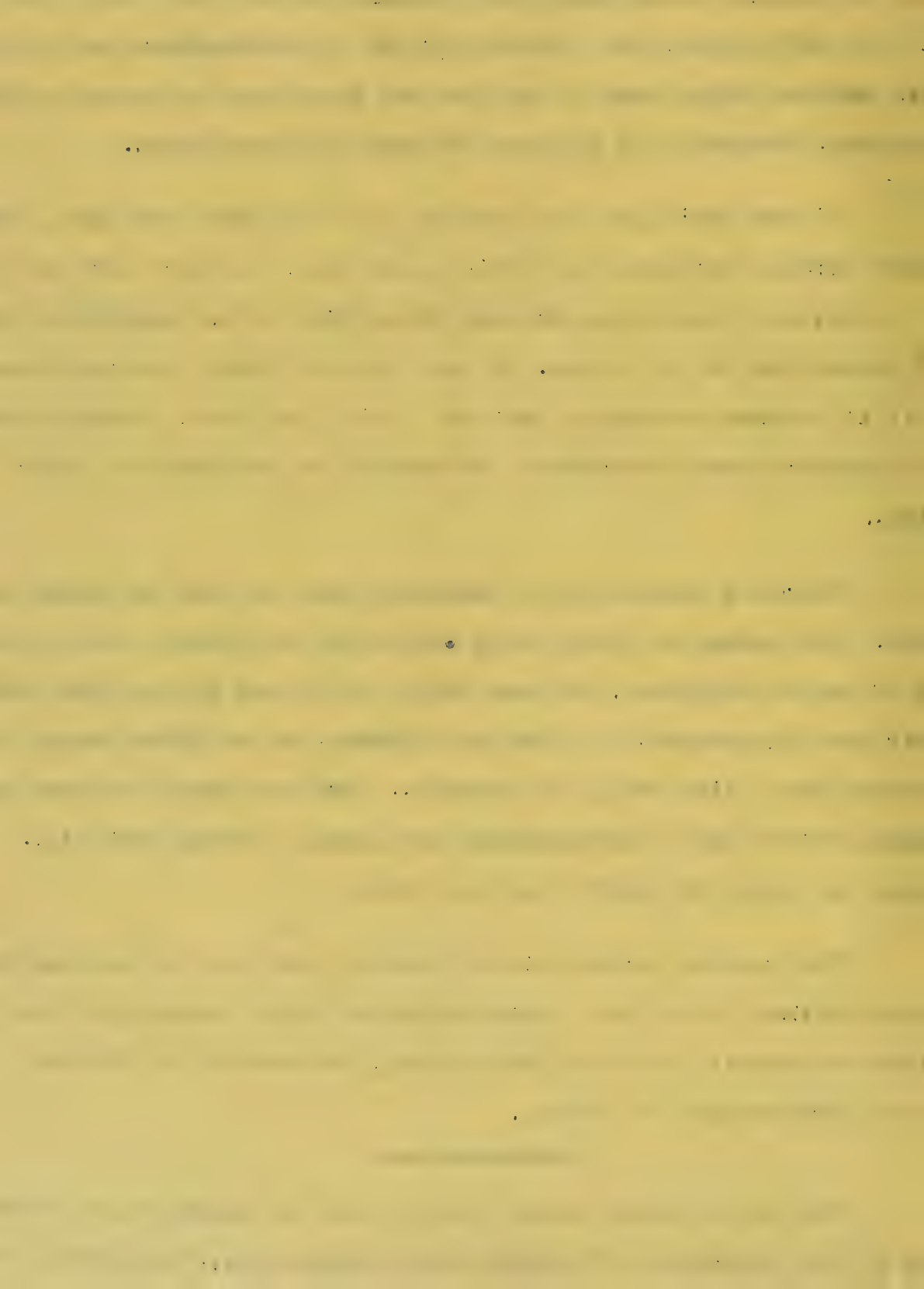
Even the "pooch" is feeling the pinch in the share-the-meat program. And the amount of contradictory information on feeding dogs which is appearing almost daily isn't making matters any easier for his owner. So let's glance for a moment at the recommendations for feeding pets in wartime which come to us from the department of animal pathology and hygiene, University of Illinois College of Agriculture.

If you can't get good quality dog food where you live, try a home-made mixture but make sure it's a good one. We can't put our pet dog on a ration of some good old corn bread with a few vegetables mixed in and expect him to get along. He can live all right on a meatless diet, if it becomes necessary, but not a diet like that. Maybe horse meat, slaughter house by-products or cereals are available in your locality.

Here's a formula for a temporary menu to make one pound of dog food. Six ounces of dried bread (enriched preferred), two to four ounces of boiled potatoes, the same amount of ground tripe, fish products or other meat by-products or milk by-products, two or three ounces of soft ground bone, like veal, for example. Then add about an ounce or a half ounce of fat and a tablespoonful of animal feeding fish oil. That will make one pound of pretty fair dog food.

For further information of feeding your pets in wartime see your farm adviser, your local veterinarian or write directly to the department of animal pathology and hygiene, University of Illinois College of Agriculture at Urbana.

The twenty-sixth annual tractor and gas engine short course offered by the department of agricultural engineering, University of Illinois College of Agriculture will be held on the campus this year from January 25 to 30. The course is open to anyone sixteen years of age.

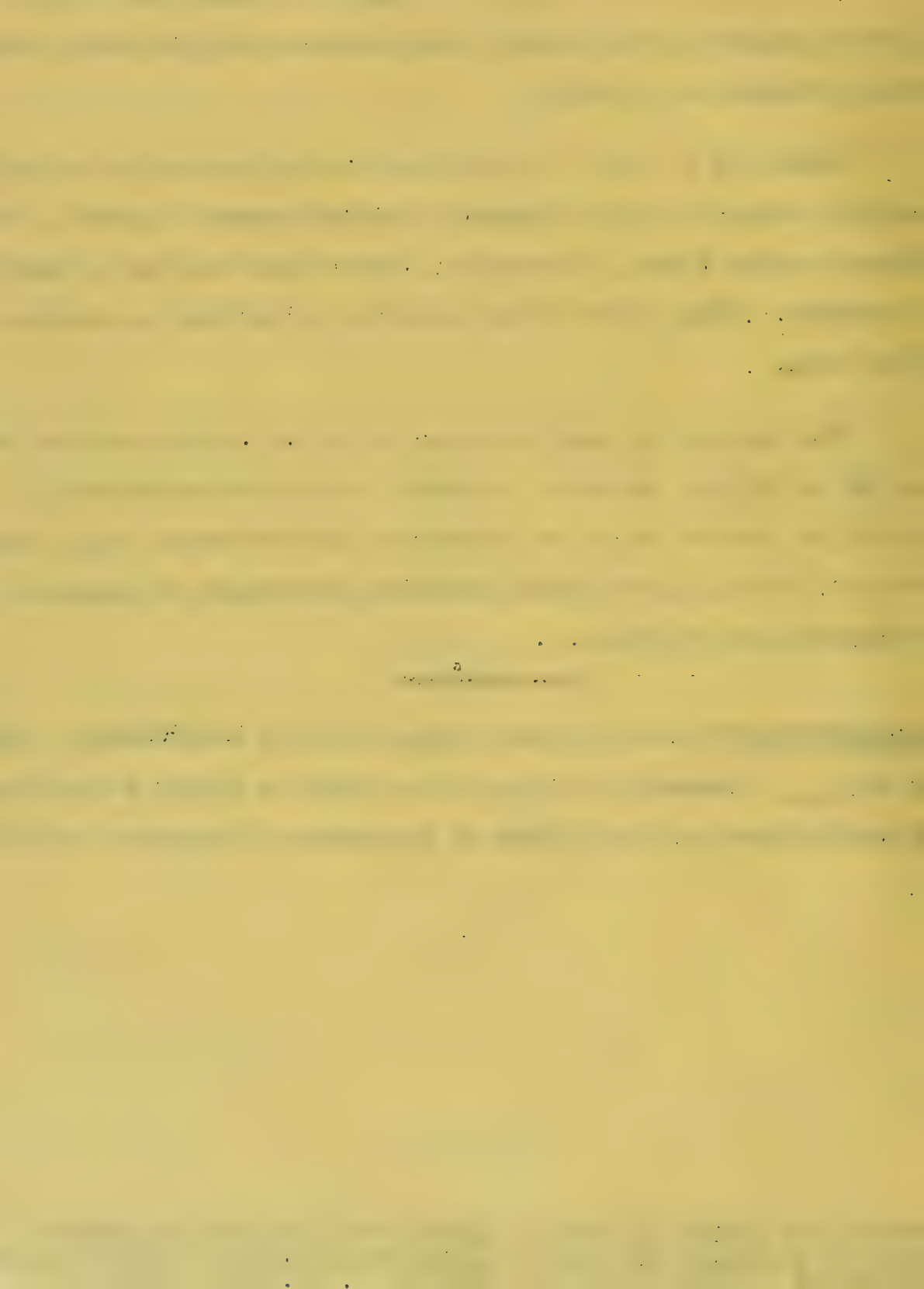


This short course, started in 1917 as a result of the first World War, has met a definite need of farm tractor operators throughout the years. The work is practical and should be of interest to many owners and operators of the 126,000 farm tractors and also many road and industrial tractors in the state.

Attention is given to the operation and principles of engine construction, valves and valve timing, high compression, ignition, fuels carburetors, rubber tires, lubrication, lubricating oils and greases and engine troubles. Four or five hours each day is devoted to practical laboratory work.

The fee for the week's course is \$2.50. Board and room will run from \$8 to \$10 for the week. However, the number registered in the course will be limited to 30, so interested persons should apply immediately to R. I. Shawl, agricultural engineer, University of Illinois College of Agriculture at Urbana.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.



(From the U. S. Department of Agriculture
(and Extension Service in Agriculture and
(Home Economics, College of Agriculture,
(University of Illinois

THIRD
ILLINOIS FARM FLASH

Speaking time: 7 minutes

January 11, 1943

(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: We bring you now the ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

"My kingdom for a horse," but not one with bots in his stomach. So if we're planning on horses for our 1943 power needs, let's not overlook the importance of getting them in top condition and health before spring. Ridding them of parasites is one step in that direction, according to the department of animal pathology and hygiene, University of Illinois College of Agriculture.

The best time to treat horses for parasites is during the winter months. That's right now, in other words. Furthermore, it's a job for a qualified veterinarian. We'd better not try it ourselves. Most of us have difficulty in even pronouncing carbon disulfide and phenothiazine, let alone giving them to a horse.

You may be interested in the area-control plan. That way, several farmers in a neighborhood get together and have all their horses treated at once. We won't go into detail. Your farm adviser can give you the particulars on how the plan works. But the area-control plan of treating horses for bots might save some time and gas and tires for the veterinarians this year. It will save some time and horses for you. Parasite-free horses work better and stand the summer heat better.

And, by the way, while we think of it, your horse may need a little dental and manicure work done at the time when you're treating him

for bots. Remove sharp corners from the teeth and trim his feet. If you expect him to work like a horse, he should look like a horse.

"Make mine Marion" can well be the slogan for Illinois farmers when buying their seed oats this year, in the opinion of O. T. Bonnett, assistant professor of plant genetics, University of Illinois College of Agriculture. There's enough Marion certified seed oats available this year to take care of 130,000 of the 3,360,000 acres Illinois farmers have been asked to raise. This acreage should yield enough seed in 1943 to plant the entire Illinois oat acreage in 1944.

In case you're wondering about the virtues of Marion oats, let's see how it measures up to some of the others. It's a fairly large, white oat, matures early, has good resistance to lodging, smut and stem rust and medium resistance to crown rust. Furthermore, it's highyielding. In northern Illinois it bested the average by $10\frac{1}{2}$ bushels to the acre. In the central part of the state it yielded $9\frac{1}{2}$ bushels more to the acre than any other variety tested. In southern Illinois it was three bushels more than the average, Bonnett points out.

That gives us a good idea why Illinois farmers will be saying, "Make mine Marion," as long as the supply of seed lasts. For further information as to the source of seed, contact your farm adviser or write directly to the University of Illinois College of Agriculture at Urbana.

And now a note on feeding hogs.

A satisfactory place to conserve protein supplements is after the growing-fattening pigs have reached 75 to 100 pounds, says B. W. Fairbanks, professor of swine husbandry, University of Illinois College of Agriculture. Protein requirements are lower then than they were at

lighter weights. If we must underfeed on protein, it can be done in this weight bracket with less effect than at other times.

Of course, your fall pigs are now in the fattening pen and should be weighing 75 to 100 pounds, depending upon when they were farrowed and how well they have done during the past fall and early winter. Fairbanks says it's a good time for the feeder, as many of his worries concerning death losses are over and his chances of getting those 75 to 100 pound pigs to market as fat hogs are pretty good.

If Illinois swine growers are to increase their pork production 15 per cent this year, they will need to keep a watchful eye on balanced rations. Right now that means a full feed of corn with the right amount of protein supplements, alfalfa meal and minerals for fattening pigs. But protein supplements are scarce and they'll continue to be that way in all probability. So let's conserve them where it will do the least harm; that means conserving them after the growing-fattening pigs have reached 75 to 100 pounds.

For further information on feeding hogs, ask your farm adviser for the free leaflet by the same name. The leaflet entitled "Feeding Hogs" has just been released, and copies are also available for free distribution from the University of Illinois College of Agriculture.

Meet the dairyman of the month, Jesse E. Tuttle, of West York, Illinois, in Crawford county. In military circles he would, no doubt, be awarded some medal for distinguished service, in the opinion of W. W. Yaap, professor of dairy cattle breeding, University of Illinois College of Agriculture.

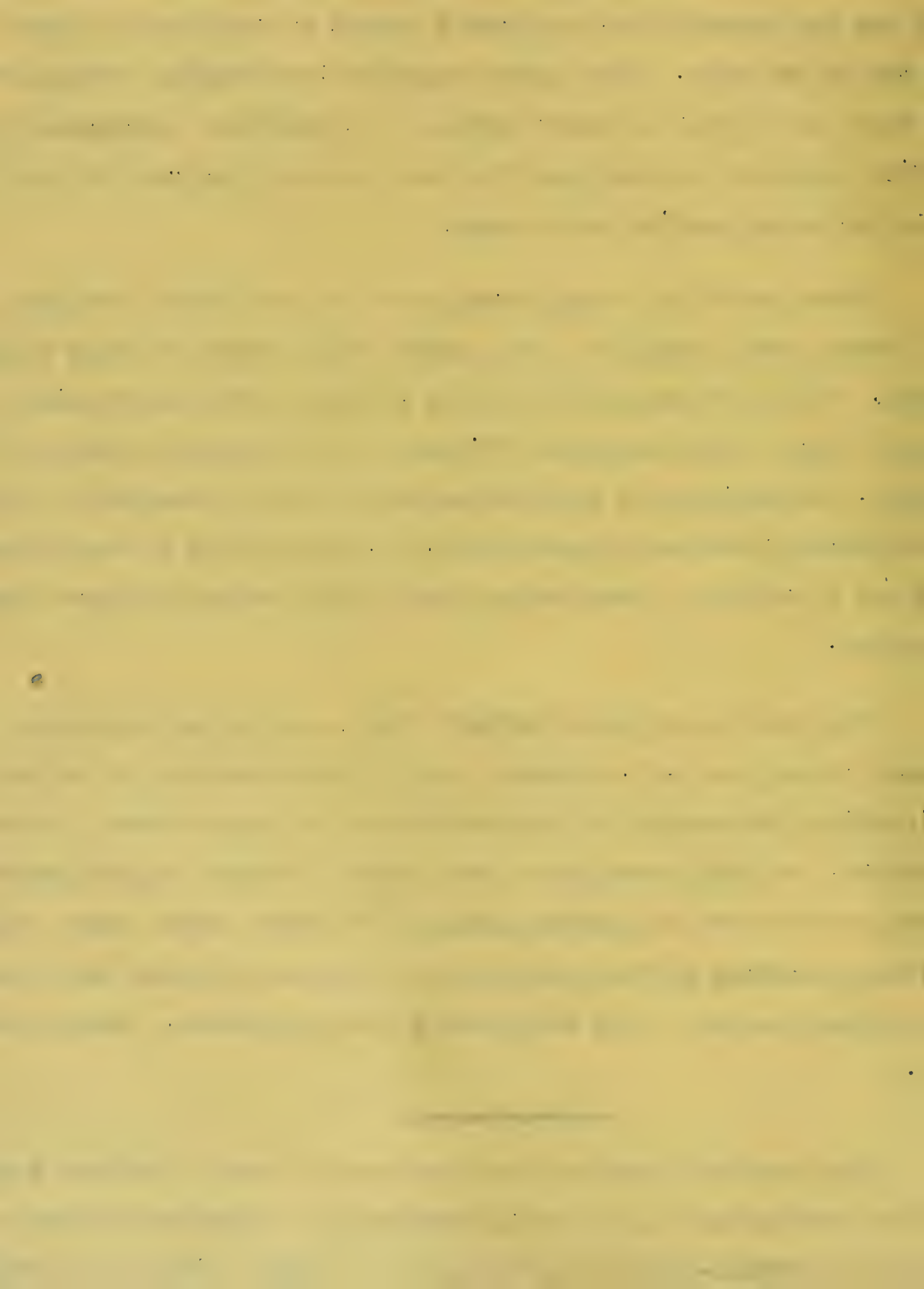
A year ago, 175,000 pounds of Guernsey milk and 56,000 pounds of pork were produced on the Tuttle farm. However, things are a little

different this year because of the labor situation. There's just Mr. and Mrs. Tuttle left to carry on, now that the hired man has gone. While high school boys have made them some good hired hands during silo filling and hay making time, they can't depend on that kind of labor 12 months out of the year. This labor situation is a federal problem, Mr. Tuttle says, and sooner or later farmers will need more experienced help if they're expected to bring home the bacon and all the rest of the farm products for which they're being asked.

There won't be as many crops grown on the Tuttle farm this year as there were a year ago. The land's being rented and feed will be purchased. So he and his wife will have a little more time to milk 23 cows from a herd of 65 head, feed 375 head of hogs and take care of 45 brood sows. In addition to all this as well as being president of the Illinois Guernsey Breeder's Association, Mr. Tuttle says he should be able to get in a little sleep between ten in the evening and four the next morning.

What can you do about safety? Well, here's one suggestion that comes to us from E. W. Lehmann, head of the department of agricultural engineering, University of Illinois College of Agriculture. Check your ladders. Be sure there are no weak rungs. Depend on your hands rather than your feet in climbing ladders. In other words, grasp the sides firmly instead of the rungs above. They may be weak. And place your feet near the end of the rung rather than the middle. Always be careful.

Here are the dates for the forty-second annual Farm and Home week to be held on the campus at the University of Illinois College of Agriculture in Urbana-Champaign, February 2, 3 and 4. The usual five

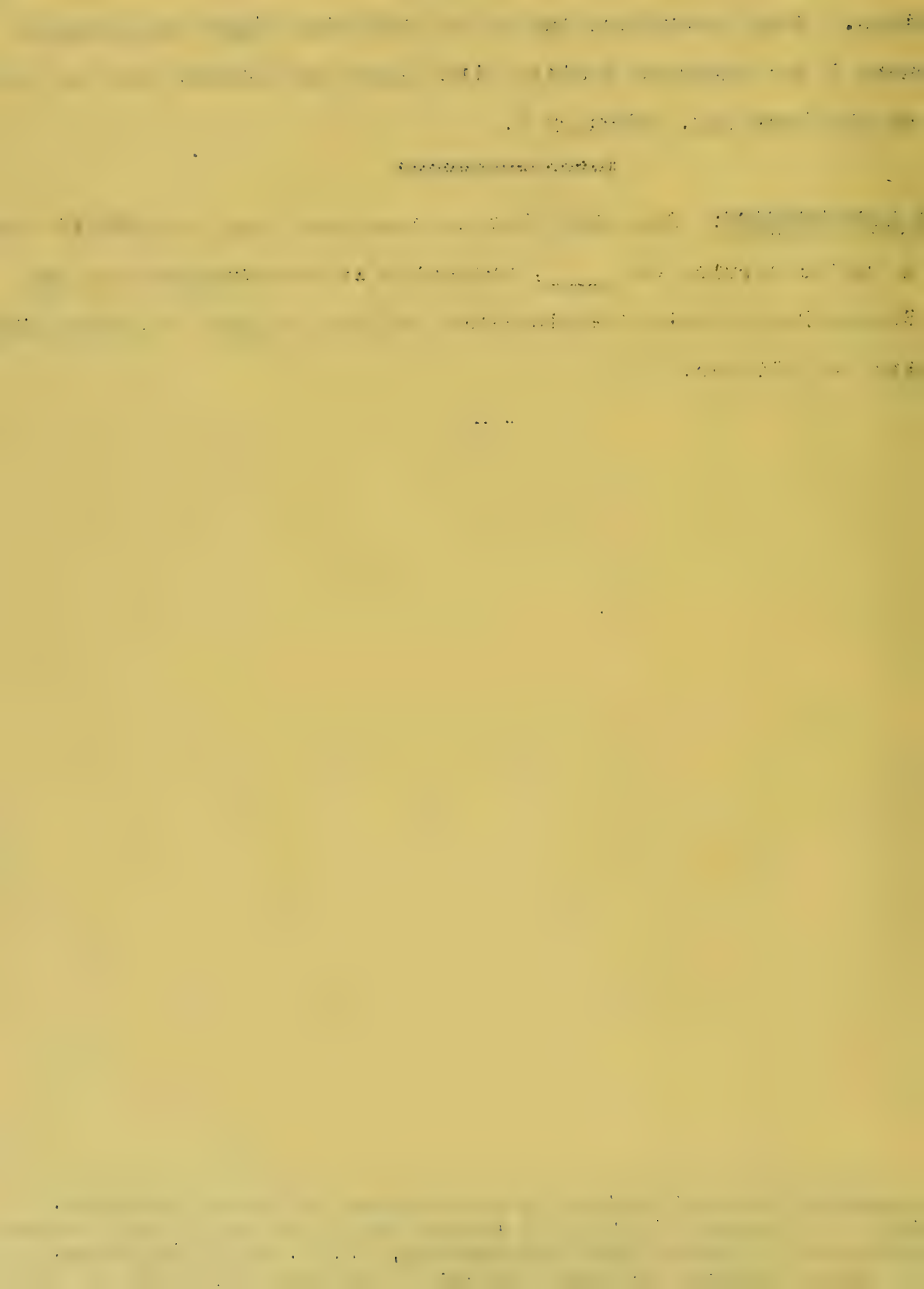


day session has been shortened in view of gasoline and tire rationing. While agricultural economics and home economics problems will be presented all three days, February 2 will also be devoted to livestock discussions. Crop production and soils will high light the program on February 3 and subjects dealing with dairy and poultry will be presented on the last day, February 4.

CLOSING ANNOUNCEMENT: And with that we conclude today's ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois, College of Agriculture, and the United States
Department of Agriculture cooperating. H. F. Rusk, Director.
Acts approved by Congress May 8 and June 30, 1914



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FOURTH
ILLINOIS FARM FLASH

(From the U. S. Department of Agriculture
(and Extension Service in Agriculture and
(Home Economics, College of Agriculture,
(University of Illinois

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Speaking time: 4 $\frac{3}{4}$ minutes

January 14, 1943

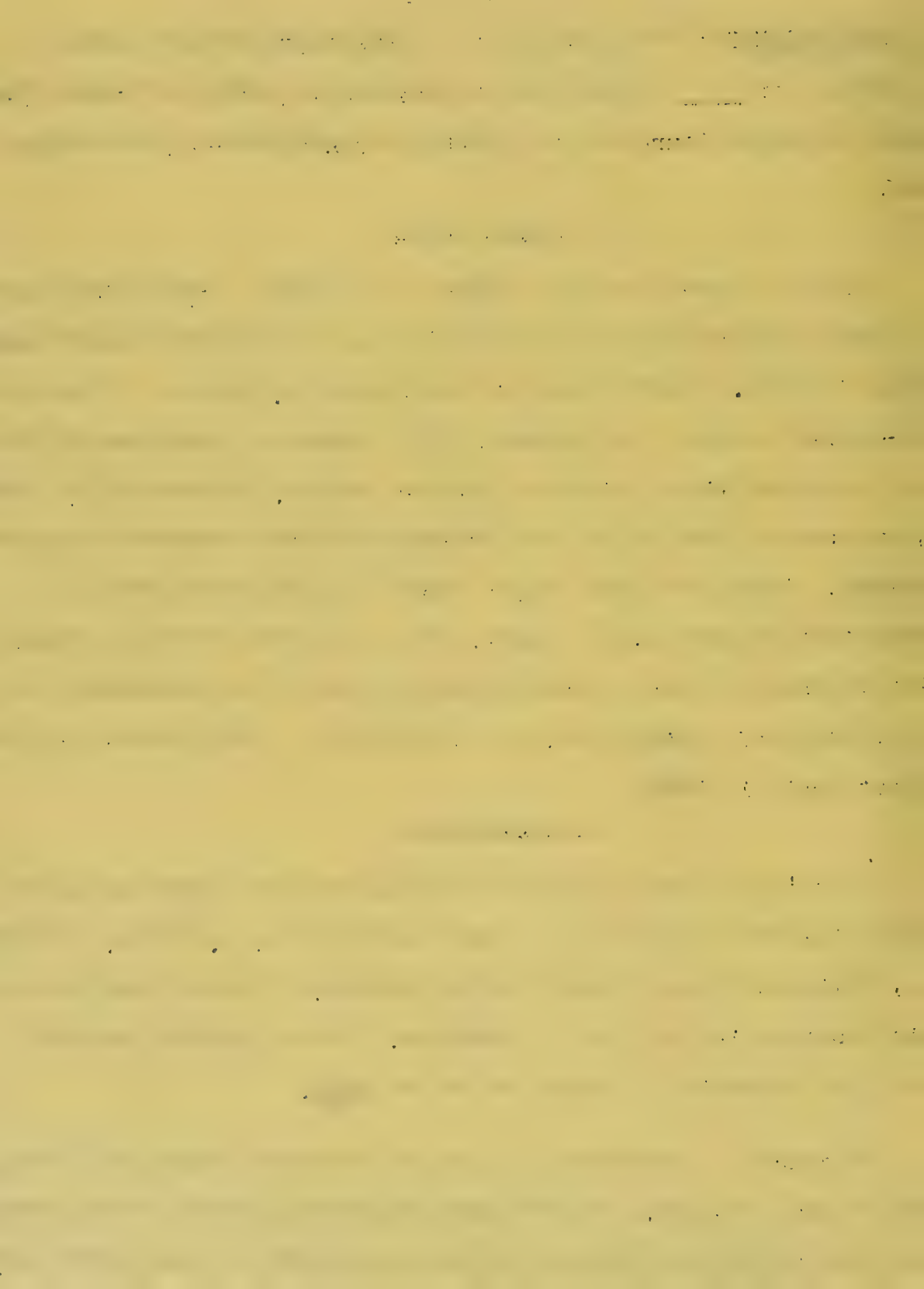
(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: Now here again is the ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

A ton of pork from one litter in 180 days. That's the short story of what each of 51 Illinois 4-H pig club members did toward war-time goals in 1942. Heading the list was Loren E. Nelson, of Varna in Marshall-Putnam county. He produced 3,135 pounds of pork from 14 Poland Chinas in a single litter within a 180-day period. Raymond Hills, Knox county, was second with 10 Spotted Poland-Berkshire crossbred pigs at 2,620 pounds. Donald Willard, Adams county, placed third with 11 Hampshires that weighed 2,519 pounds. The ton litter contest, under the direction of the 4-H club extension specialists of the University of Illinois College of Agriculture, had 591 entries. The project will be carried out again in 1943.

There's a fifth columnist stealing the beef right off your steers and milk from your cows, in the opinion of J. E. Davis, extension forester, Illinois State Natural History Survey. The only way you can stop this saboteur is to plant a windbreak. You've already guessed that the fifth columnist in question is the wind.

Of course, a windbreak has other advantages than protecting livestock in the feedlot. There's the sheltering effect on the farmhouse, as well as the improvement in the appearance of your farmstead.



Windbreaks aren't expensive to set out and require a minimum of labor. Furthermore, Davis says, you don't need to wait for ever for them to become effective. So let's consider now the possibilities of using one around our farmstead next winter, and the time to start thinking about it is right now.

For information on a windbreak, what kind of trees to use, where it should be planted and how to plant it, ask your farm adviser for a copy of circular 38. A copy is also available for free distribution by addressing your request to the University of Illinois College of Agriculture at Urbana.

Small dairy farmers can do much toward meeting the 1943 food goals. Men all over the United States, whose farms are too small to be classed as "essential" by draft boards, are still important in the total dairy production of our nation. Uncle Sam needs more milk, butter and cheese, not only for our fighting forces and for shipment to our allies, but for our civilians on the home front as well.

Sixty-seven per cent of this country's farms have from one to four dairy cows. These cows produce 27 per cent of our milk...with the production for each cow in these small herds lower than the average for the country as a whole. There are two things which many small dairy farmers can do to remedy this situation. First, increase the number of cows in the herd. It's possible for a single man to care for eight to ten cows in addition to his other farm operations. Second, increase the production of the present herd by heavier feeding. Neither of these suggestions means that you need to hire more farm hands.

The extra milk can be sold in the local market. The cream can be sold to the creamery, or if you are on a milk route, your whole milk

can be disposed of in that way. Perhaps you'll even want to ship some of your milk to more distant plants, as prices are good this year.

Hog production in the year ahead will be much larger than even the record high mark of 1942, which itself outstripped the previous record. This is the hog production outlook as seen by agricultural economists after analyzing the latest figures available on the size of the 1942 fall pig crop and the total indicated farrowings for next spring.

Both the 1942 fall pig crop and the indicated number of sows to farrow in the spring are nearly one-fourth larger than the previous records. The number of hogs more than six months old on last December 1 was much larger than a year earlier and was the largest on record on that date.

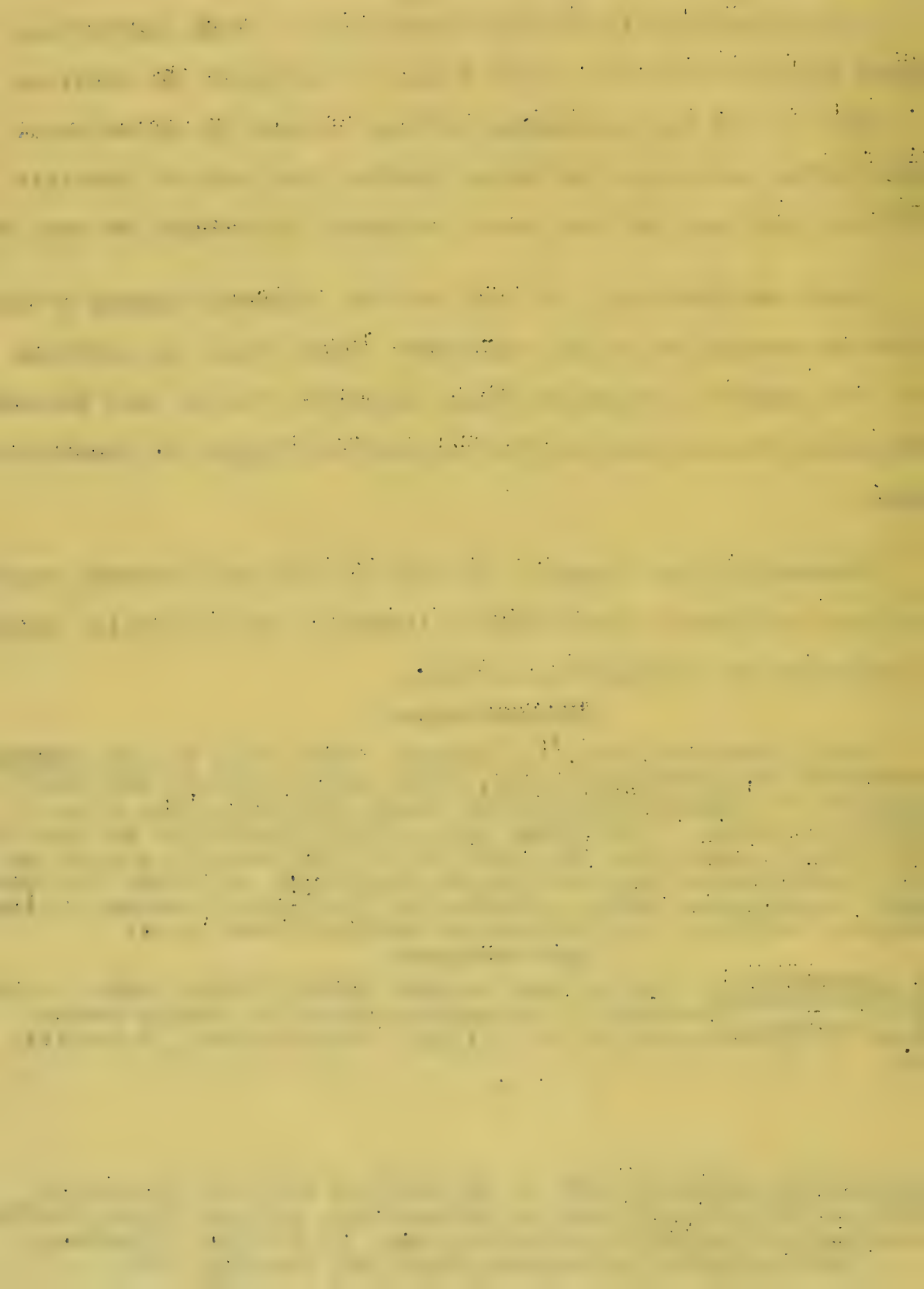
Marketings and slaughter of hogs in 1943 will greatly exceed those of previous years, these figures indicate, and will raise income of hog producers to all-time high levels.

While electric power is playing a large part in our program of food production by providing lights, water under pressure and power for the operation of milking machines and other equipment, its dangers are not to be overlooked. A few weeks ago, a Champaign county man was killed when an electric high-power line which was broken came in contact with his car. High-tension lines are always dangerous. A broken line should be brought immediately to the attention of the utility company or the cooperative. Let's not run the risk of touching such lines.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois, College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director.
Acts approved by Congress May 8 and June 30, 1914



FIFTH
ILLINOIS FARM FLASH

(From the U. S. Department of Agriculture
(and Extension Service in Agriculture and
(Home Economics, College of Agriculture,
(University of Illinois

Speaking time: 8 minutes

January 18, 1943

(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: Here again is the ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

Government officials have called on farmers, along with everybody else, to take new stock of where they can save on the use of gasoline and fuel oil.

The need to save applies to every part of the country.

In explaining the need for further saving on gas and oil, we might point out that the northeast happens to be the hardest hit by the shortage so far. The reason is that up to Pearl Harbor, the east coast got 95 per cent of its gasoline and oil by tankers. Today, most of our tankers are carrying gasoline and oil for our tanks, trucks and planes in North Africa, the South Pacific and other parts of the world. So, the east coast now has to rely mainly on railroad tank cars.

But the west coast also is feeling the shortage of ocean tankers. Since the "Japs" took over gasoline and oil supplies in the Far East, our army and navy in Alaska and throughout the Pacific now have to rely on tankers bringing gasoline and oil from the Americas. So the west coast also has to depend more on the railroads and tank trucks.

With the new big demand, the railroads find they are shorter of tank cars. Besides carrying more gasoline and fuel oil for the east and west coasts, the tank cars are carrying tremendous amounts of oil

and gasoline for military air fields and other military needs in the United States. For awhile, the railroads tried to meet the demand by running the tank cars at express train speed. But, because of the wear and tear on the cars, they've had to cut down to 40 miles an hour.

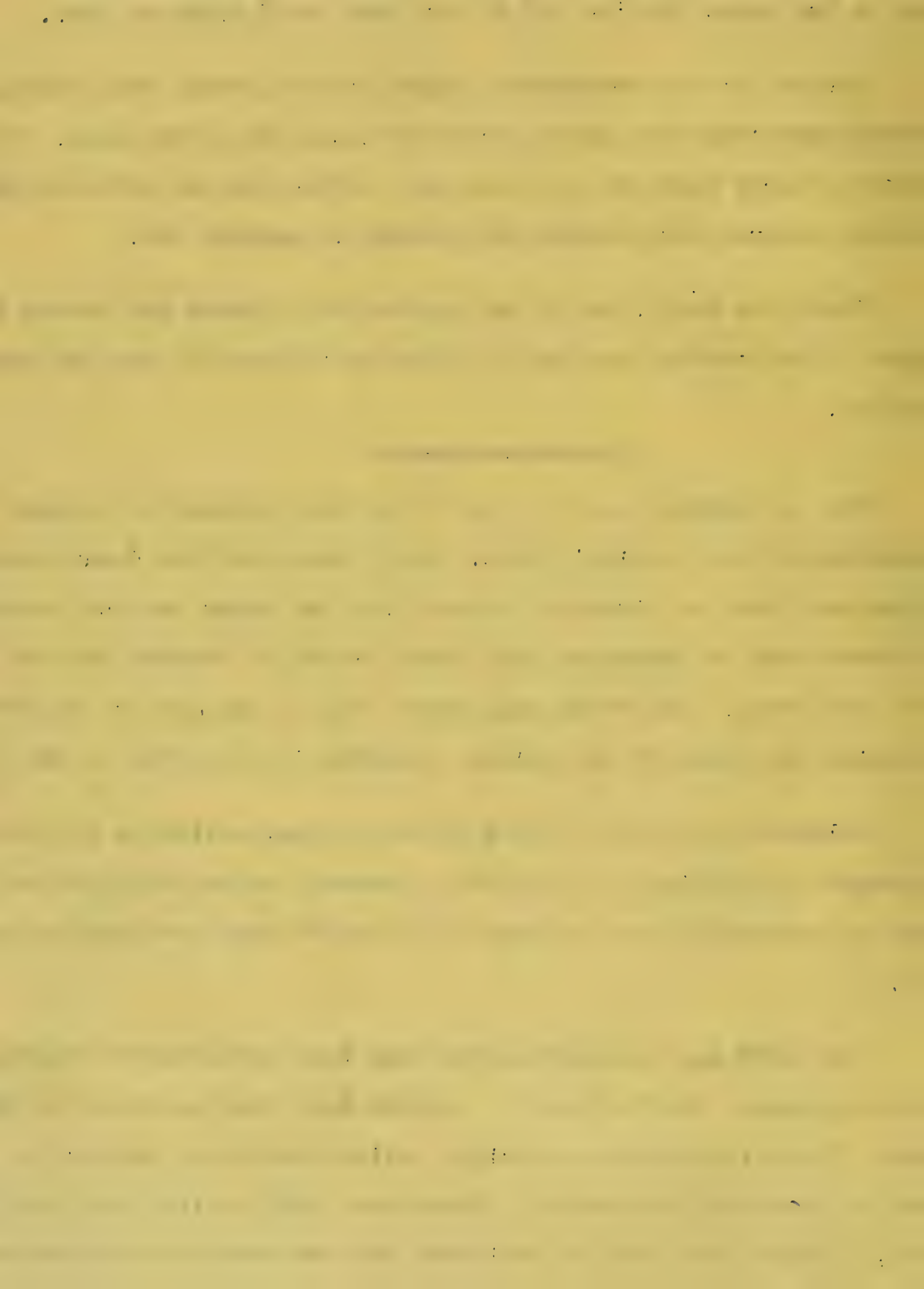
Because of the tremendous demand for tank cars, the government has ordered that tank cars not be used for hauls under 200 miles. So even farmers fairly close to oil wells and refineries are affected by the shortage because tank trucks are limited in numbers too.

There you have some of the reasons why farmers and others in every part of the country are being called on to save all the gas and oil they can.

Now, as always, meat is one of our best sources of protein and the foundation of the soldier's diet. When Alexander the Great invaded India, his men lived on livestock stolen from the Medes and the Persians. Julius Caesar told of arranging with local tribes to provide his men with meat and grain. And today meat ranks high in the list of the foods of our armies and those of our allies fighting in all parts of the world.

Soldiers eat about a pound of meat a day...twice as much as they consumed in civilian life. That, of course, means that farmers must step up production here at home if we are to keep our fighting men well fed.

The 1943 meat production goal has been set at about twenty-six billion pounds. That's close to a sixth more than we raised in the past year. Food distribution officials estimate military needs will take one third of the total production. Hence even with a sixth more meat this year, no more meat will be available for the civilian population.



Each farmer can help the United States meet the national goal for meat by seeing that his farm produces a maximum amount this year. Feed stock to heavier weights, market all the meat possible in an orderly fashion and keep the quality of your stock high. In this way you can increase production now and assure continued production in the future.

As farmers "sign up" for what they will produce this coming year, here is a reminder for pork.

You remember, Secretary of Agriculture Wickard called for 15 per cent more hogs in '43. To the surprise of nearly everybody, the December pig crop report indicated that farmers intend to produce not just 15 per cent more pigs next spring, but 24 per cent more. If farmers make a corresponding increase in the '43 fall crop, they will do far better than the experts thought possible.

That fine prospect is mighty welcome, too. We need every pig-- every pound of pork-- we can get. The estimates of '43 needs for meat are steadily increasing. Within the past two or three months, the estimate for our army and navy and fighting allies jumped from 6 1/2 to 7 1/2 billion pounds -- and now to 8 to 8 1/2 billion. A large share of the meat wanted is pork. Farmers can produce 24 per cent more pigs this year -- and still not produce enough pork to fill the demand.

There's a big need for other farm products, too. For example, goals call for 2 per cent more milk this year than last. We'll need more dairy products just as we do pork. So, in planning for hog production, farmers are urged to maintain dairy production. Farmers will need to take into account and plan for possible greater disease hazards, and to plan for the feed they will need. It won't do any good to farrow pigs if you can't raise them. But if you can successfully raise more

big without interfering with production of other essential products, the country needs them.

Victory will have a long row to hoe in 1943.

The home-front strategy for the garden sector calls for every American to plan a victory garden for his own family, if he has a suitable place for it.

Fifteen million gardens were estimated in 1942 but more are needed this year--more and bigger. The farm goal--a garden on every farm--calls for more than six million victory farm gardens in 1943. This will be an increase of about 20 per cent over the five million farm gardens estimated for 1942. More than twice as many victory gardens are predicted for urban and suburban Americans.

Twenty million victory gardeners will give an essential wartime service. Four factors make home gardens necessary:

Military and lend-lease demands for vegetables and fruits.

Shortages of materials for cans.

Transportation shortages that make long hauls of fresh vegetables out of the question.

Finally, farm labor shortages make the home gardener's manpower indispensable this year.

Despite these difficulties, we are looking forward to a successful year of victory gardening in Illinois to help supply civilians with not only their general food needs but also their nutritional requirements for vitamins and minerals.

The December pig report shows that farmers are responding in a fine way to the call for more pork--both the fall crop and the crop in

prospect for next spring are nearly a fourth larger than the previous all-time records.

The next job is to raise successfully all of those pigs we can. And that brings us the problem of disease. With record numbers of pigs on farms, there's more chance of disease being passed along from hog to hog and from herd to herd.

The department of animal pathology and hygiene, University of Illinois College of Agriculture cooperating with the U. S. Department of Agriculture suggests several things farmers can do to help keep down disease losses.

Where possible, the hog lot should be located on a part of the farm that does not border the public highway. When hogs are in a field next to the road, they can pick up infection, say from trash from passing livestock trucks. And there's danger from visitors and trespassers who have recently been on farms having hog cholera or some other disease.

And, as for cholera, that brings a further caution. If you've had cholera in your neighborhood in the past, it's a good idea to immunize your pigs by way of precaution. And, certainly, when cholera actually strikes in your community, immunize your pigs right away, if you haven't already done so. When cholera starts, it spreads rapidly--and when it hits a herd, it's very deadly.

One other point: In the north central states in particular--and to some extent in other regions--many hogs pick up tuberculosis from poultry. So keep the hogs and the chickens separate. And whatever you do, let's not feed the hogs a chicken that has died of some unknown cause.

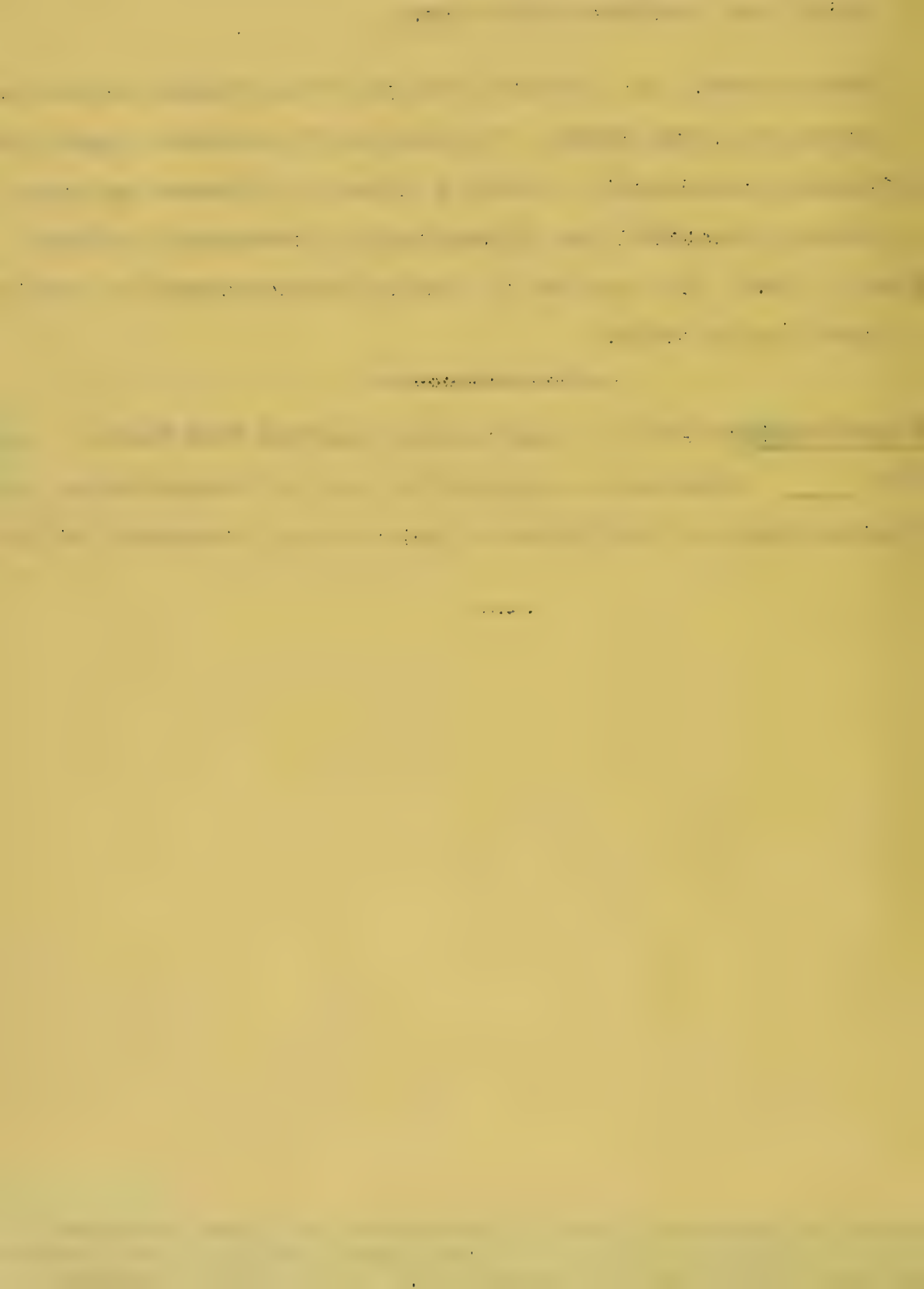
Keeping hogs away from the highway, immunizing against cholera, and keeping pigs and chickens separate will save pigs.

And we'll need every pig--and every pound of pork and lard--we can get.

Let's keep the smoke pipe clean.

Burning soot, as a result of heavy firing during extreme cold weather, causes many home fires. The burning of excelsior, paper and other inflammable materials in either a stove or a furnace may cause the soot in a chimney to catch fire. Unless carefully observed, serious results may follow. The practice of burning out soot when the roof is damp is a good one to follow.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.



Speaking time: 5½ minutes

January 21, 1943

(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: Here again is the ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

Illinois beekeepers are invited to attend the annual meeting of the American Honey Producers League to be held in the Hotel Morrison, Chicago, January 26 and 27. Among the topics to be discussed at the two-day session are factors affecting the use of bees in cross pollination by V. G. Milum, assistant professor of entomology, University of Illinois. Incidentally, Milum points out that there are 22 fruits and 30 seed crops which are dependent on bees for their pollination.

More hog houses are needed on Illinois farms, says D. G. Carter, professor of agricultural engineering, University of Illinois College of Agriculture. Farmers can provide the necessary shelters and at the same time follow the recommended sanitation program by building one or more of the small movable hog houses.

It isn't easy to obtain some kinds of lumber and, of course, there's a limit on farm construction to discourage extensive building programs. Therefore, the movable hog house is the best type to build now, Carter points out. In the first place, it uses small amounts of lumber and furthermore, it can be made on the farm. If need be, native home sawed lumber or second hand lumber can be used.

The common types of movable houses are the A-type and the Illinois "sunshine". In Lee county, many farmers have built the six

by six foot flat top house, recommended by Farm Adviser C. E. Yale.
Another design, developed in cooperation with E. T. Robbins, ^{livestock}/extension specialist is exactly like the A-type with the ridge flattened to a top of about two feet eight inches with low head room. This house is usable in severe weather, even if built without a door or a floor. This is the new Illinois War Winner hog house.

Plans for all of these houses can be secured from your farm adviser or by writing directly to the University of Illinois College of Agriculture at Urbana. Ask for the mimeograph sheet on hog production equipment, number 369. It contains a list of all the hog production equipment. The number again, 3-6-9.

Further curtailment in civilian consumption of milk products probably will prove necessary this year if military and lend-lease demands are met. Agricultural economists estimate the Nation's requirements for milk in 1943 will be at least 20 billion pounds larger than the prospective supply.

To ease the temporary civilian shortages of evaporated milk, which recently appeared, two million cases of this product were released from the stocks it had on hand.

The 1943 milk production goal on Illinois farms has been set at 5,600,000,000 pounds. This is a minimum goal, however, and farmers are asked to exceed it if possible. Even with the larger production that is asked for in 1943, agricultural economists believe civilian uses of milk products may need to be cut by about 16 per cent, in order to insure essential supplies.

The growing demand for milk and dairy products already has brought about certain measures to reduce civilian consumption, but

additional reduction will be needed. Manufacturers of spray-dried skim milk are now required to set aside 90 per cent of their production for delivery to government agencies. Late in November, the War Production Board froze half of the supply of butter in storage at the 35 principal markets. Then, retail sales of whipping or other cream with more than 19 per cent butterfat were prohibited. And in December, the quantity of milk solids used for manufacture of ice cream or other frozen desserts was limited to 60 per cent of that used in October. As a result of these orders, it is estimated that the equivalent of 4 or 5 billion pounds of milk will be added to the supply available for filling military and lend-lease requirements.

With red meats getting scarcer/^{on}the American family table agricultural economists say supplies of chickens in coming months will be much larger than in the corresponding period a year ago. Although supplies are at seasonally low levels, storage stocks of chickens are the largest on record for this time of the year, and the output of chickens in specialized poultry areas will be much larger this winter than last.

Heavy operations by commercial hatcheries in the past few months point to a new high output of chickens in 1943, in line with the 1943 production goal. The Illinois war goal for chickens is 43,684,000, about one-twelfth higher than a year ago. The economists further say the supply of poultry meats will be bolstered by all-out production of turkeys. The 1943 goal for turkeys is 728,000, 10 per cent above 1942 production.

Egg production in the coming season is expected to be the largest on record. Agricultural economists estimate we have about 8 per cent more laying hens this January than in January 1942. Although

the economists expect some decline in number of hens in later months, they say the decline will be less than usual, because of favorable egg prices in relation to feed costs. In the flush production months of the spring, the price of feed compared to the price of eggs will probably be the most favorable to poultrymen on record. As result, egg producers will probably feed flocks heavily this spring, and may be able to top even the record set in 1942.

Supplies of eggs for civilian consumers, however, will be no larger in 1943 than last year, because we will need more eggs for military and lend-lease supplies.

The feed outlook for 1943 production of meats, milk, eggs and poultry is indicated as favorable to livestock feeders. Large supplies of feed grains and hay were brought forward into the New Year from the fall of 1942.

Agricultural economists report feed grain supplies for 1943, which were available in the fall, are 12 per cent larger than a year ago, hay supplies are 9 per cent larger, and supplies per animal unit on farms are somewhat larger for both grain and hay. The economists also expect prices of feeds in relation to prices of livestock and livestock products will prove favorable to livestock production in the first half of the new year.

However, high-protein feeds to supplement grain and hay will be scarce in relation to demand in places, and farmers must use these very carefully in order to spread the supply around among all vital uses.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois, College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director.
Acts approved by Congress May 8 and June 30, 1914

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EIGHTH

ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture in cooperation with
(U. S. Department of Agriculture

Speaking time: 7 minutes

January 28, 1943

(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: Here is today's ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

The St. Louis area vegetable growers' school will be held in the Fairmount Hotel, Collinsville, Illinois, on February 11. Included in the subjects for discussion are price ceilings and supports, crop bounties, labor, our food problem for 1943, making the best use of our limited supply of nitrogen fertilizer, the certified seed potato situation, the corn borer situation and war crops. Staff members from the University of Illinois College of Agriculture appearing on the program include L. A. Somers, J. W. Apple, and M. B. Linn.

Six to 10 million pounds of honey and about 150,000 pounds of beeswax are produced in Illinois in average years, according to V. G. Milum, assistant professor of entomology, University of Illinois. In times of sugar shortages, these amounts of honey may seem to be very significant. However, the beeswax is probably more vital since the War Production Board has listed more than 350 uses for beeswax in the prosecution of the war.

Then, too, there is another less commonly recognized value of bees, Milum points out. This is their all-important aid in the pollination of flowers for the production of fruits and seeds of many important vegetable, truck and field crops. Twenty-two different fruit crops and 30 seed crops are primarily dependent upon honeybees for the transfer of pollen from flower to flower.

In the production of field crops seeds such as the various clover, pollen needs to be transferred only from flower to flower of the same kind of plant. The fuzzy worker honeybees are admirably equipped for the job as they visit the flowers in search of pollen to feed their young and nectar which they convert into honey for their use as well as ours. Their natural instinct of visiting only one kind of flower on a particular trip is a direct aid in the transfer of the proper pollen.

Honeybees aid in the cross-pollination of fruits where pollen from some other variety in the same species of plant is needed before fruit will form. This is the case with some two-thirds to three-fourths of the commercial varieties of apples as well as many of the other fruits. Milum urges orchardists and beekeepers to cooperate in providing strong colonies of bees within flying range of orchards where varieties requiring cross pollination are intermingled with those which have pollen satisfactory for such a cross. It may mean the difference between success and failure.

Now is the time to apply the first treatment for the control of ox warbles, says B. G. Berger, of the Illinois State Natural History Survey. His recent examinations at stockyards indicate many feeder cattle, heavily infested with ox warble grubs, are being shipped to these yards. In view of the need for leather, Illinois shippers can render a valuable service by treating for the control of this insect and thereby reducing the damage to cow hides.

The most satisfactory way to treat cattle for the control of grubs is to scrub the backs of the animals with a wash, using a stiff fiber brush. The wash is made up of one gallon of water, 12 ounces of

5 per cent rotenone and two ounces of soap. The materials should be mixed just before using and applied to the animals while they're being held tightly in a pinch gate. Thirty days after the first and second treatments another similar application should be made with the wash over the withers, chine, loin and rump. Treatment should be repeated every thirty days while grubs are visible in the backs of the animals.

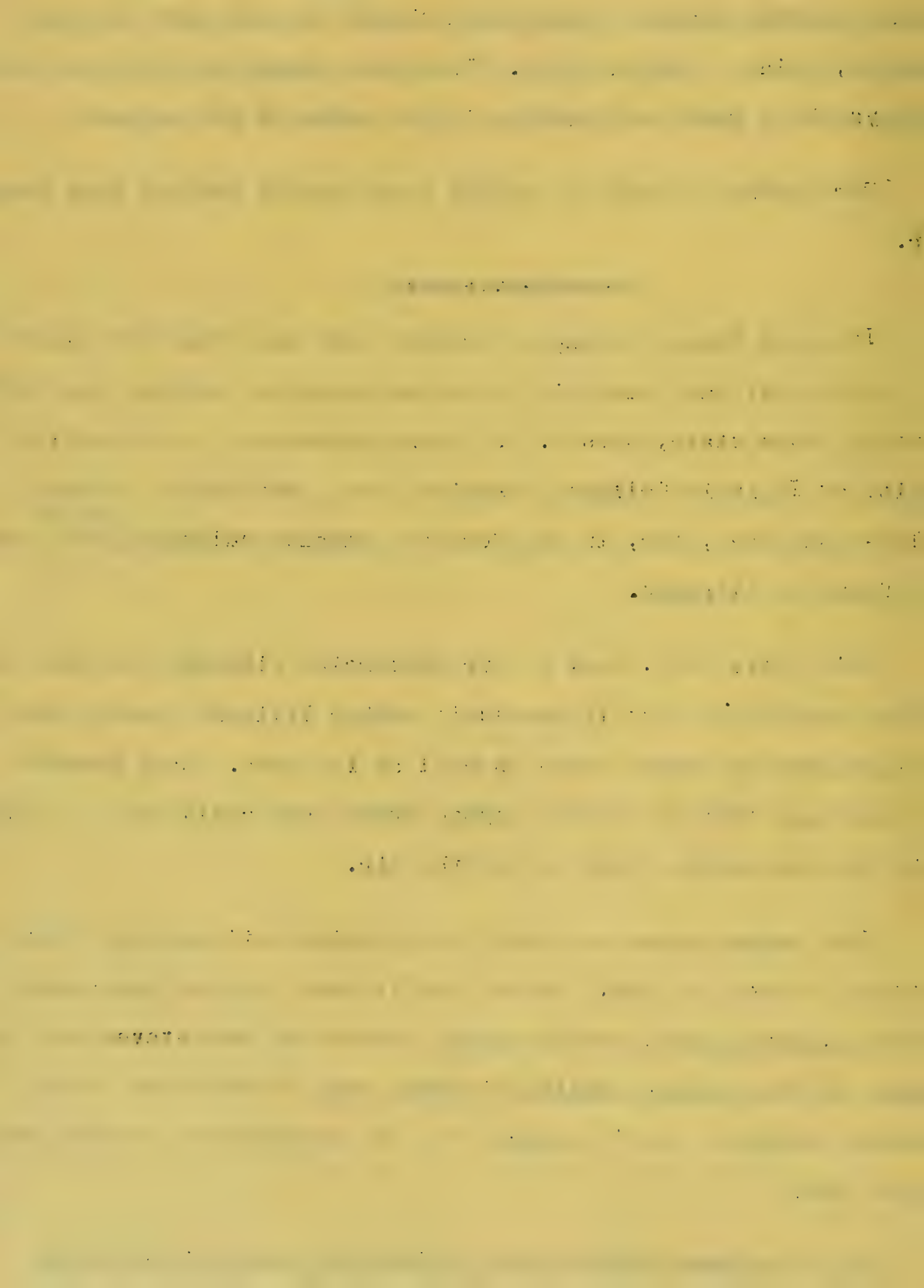
For further details on cattle grub control contact your farm adviser.

It would take a string of freight cars more than 300 miles in length to hold all the commercial nitrogen needed to produce the 1943 corn crop in this state, says F. C. Bauer, professor of soil fertility, University of Illinois College of Agriculture. And that's putting it up in 100-pound bags, too, in the form of ammonium sulphate, ^{one of} the commercial forms of nitrogen.

Well, this year, most of our commercial nitrogen has gone to war, Bauer points out, but it shouldn't bother Illinois farmers very much. That goes for other crops as well as for corn. Many farmers learned long ago that by growing legume crops they could get the bulk of their nitrogen needs right out of the air.

When legume crops are used to replenish soil nitrogen there are two factors to keep in mind. First, you'll need to plow under some of them. Second, non-legumes, such as grain straws and corn stover, help the efficiency of the legume-supplied nitrogen when plowed under along with legume residues. Let's glance at a few experiments to show how this works out.

One experiment carried out in Macoupin county is cited by Bauer in which the corn yield was 37 bushels an acre on land where



legume seedings were omitted. On a similar plot where sweet clover was seeded for use as a green manure crop, the average corn yield was 59 bushels. Likewise, the need for combining non-legume residues with legume residues to increase the efficiency of legume-supplied nitrogen is shown in Dixon experiments in northern Illinois. On land where no legumes were grown and all above-the-ground growth was removed, the corn yield was 58 bushels an acre. On similar ground where stover and grain straw were plowed under the yield was only 60 bushels. Where clover was turned under without non-legume residues the yield was 68. But where both legume and non-legume residues were returned the yield was 82 bushels an acre.

Let's take care of our own nitrogen needs in 1943 by giving increased attention to the choice, the rotation and our method of handling crops in connection with our soil-use practices. In addition to these practices, livestock farmers will need to give proper attention to the care and use of the manure produced on their farms.

In plans to feed the nation this year and next, food officials count on farmers growing as much of their own food as they can.

That goes for hogs as well as for other products.

If you're not raising hogs but know how -- and if you still have some time to spare and have food scraps and odd bits of feed -- you can do a real service by producing at home the pork your family eats. You not only release commercially raised pork for those who are unable to produce their own meat, but you also take a burden off the packing houses, the railroads and trucks. You also cut out the work and expense in handling that pork on down through the wholesale houses and your local retail store.

In fact, you're doing just as much toward the war by growing pork for your own use as the man who raises hogs to sell.

Some hog growers make a regular business of selling pigs to folks to raise for home use. Other commercial hog growers here and there may find they are unable to finish successfully all the pigs they started out with because of lack of labor or feed.

If you are not raising hogs now and can raise your own meat, be on the lookout for a pig or two.

Here are two hints on how hog farmers can meet the shortage of equipment.

Of course, one of the most helpful things a farmer can do to meet the equipment shortage is to spread farrowings. He can make the same farrowing houses and other equipment do for several litters coming along at different times.

Many hog growers are also making their own equipment. For example, specialists of the University of Illinois College of Agriculture and the U. S. Department of Agriculture report hog growers are making self-feeders and creeps and farrowing houses -- with odd bits of old lumber, local-sawed lumber and other material around the farm, and with their own labor. They got their plans from the farm adviser and the College of Agriculture at Urbana.

Some farmers who don't have enough lumber around the farm for hog houses -- and can't buy it -- are providing shelter for their pigs with bales of straw, with straw thrown over framework of poles and wire and in other ways. The main thing is to provide a place that's dry and free from drafts.

To take care of early spring pigs some farmers use electric brooders. Any handy man can make an electric brooder with a few boards, a piece of light cord, an electric socket and bulb and a tin reflector.

By making equipment at home and spreading farrowings, many farmers can handle more pigs in spite of the shortage of lumber and other materials and equipment.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture in cooperation with
(U. S. Department of Agriculture

THE LIBRARY

Speaking time: 5 minutes

February 1, 1943

(FOR BROADCAST USE ONLY)

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OPENING ANNOUNCEMENT: Here again is the ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

Now let's thumb through the pages of our gaily colored small fruit catalogue---we received in the mail yesterday----and glance at the varieties we'll want to include in our 1943 Victory garden. Most of us are alike in this respect, our resistance for fruit catalogues is low and sometimes we order on looks alone. But as A. S. Colby, specialist in small fruits at the University of Illinois College of Agriculture repeats-----"many are called but few are chosen." In other words, out of the hundreds of varieties listed---you can boil them down to about three or four of each small fruit when it comes to suiting your purpose.

Let's take raspberries. For home use Colby recommends Taylors or Marcys, if you want red ones. As for purples, well-----you'll go a long way to beat the Sodus. The plant is husky and the fruit is large and "tops" for canning and preserving-----Bristols are the best early black raspberries, and Naples a good late variety. Keep in mind Indian Summer for ever bearing.

Now the strawberries!----You won't go far wrong on the old Dunlap. The Dorset's a good new one. Premiers will stand a lot of frost. And as for ever bearing, try the Rockhill or Wayzata. Incidentally, ever-bearing strawberries and raspberries are the only ones you can expect a crop from this year. The rest you set this year won't bear the fruits of your labor until 1944.

Next, grapes. Well, we can go patriotic on this one and set them red, white and blue. In that order they're Caco, spelled C-a-c-o, Ontario or Portland and Fredonia or Concord.

A list of the different kinds and varieties adapted to Illinois together with a list of nurseries supplying them is available for free distribution. If you're interested, drop me a card here at the station and I'll see that Dr. Colby takes care of you. Just ask for the list of small fruits adapted to Illinois and the nurseries where they can be obtained.

Every acre must do its duty in supplying feed for the dairy herd if we are to meet the 1943 milk production goal of five and one-half billion pounds, says W. B. Nevens, professor of dairy cattle feeding, University of Illinois College of Agriculture. He points out that some fields will produce more feed for cows this summer if planted to emergency pasture crops than if allowed to remain in unimproved grass pasture or if planted to low-yielding grain crops.

So let's glance at one of the heaviest yielding pasture crops for use in midsummer and early fall. It's Sudan grass and soybeans seeded together at the rate of 20 to 30 pounds of Sudan grass and 60 to 90 pounds of soybeans to the acre. Nevens says dairy cows "go for it in a big way." This mixture of 20 to 30 pounds of Sudan grass and 60 to 90 pounds of soybeans may be planted in one operation on well-prepared seed beds by use of a grain drill. Seed shortly after corn planting time.

On soils which will grow clovers, red clover and sweet clover sown in the small grains in spring usually furnish good emergency late summer and fall pastures under central and southern Illinois conditions.

Lespedeza is used successfully in this manner in the southern part of the state.

Spreading liberal quantities of barnyard manure before preparing the seed bed or as top dressing to pastures already established greatly increases yields and quality of the forage from the feeding standpoint.

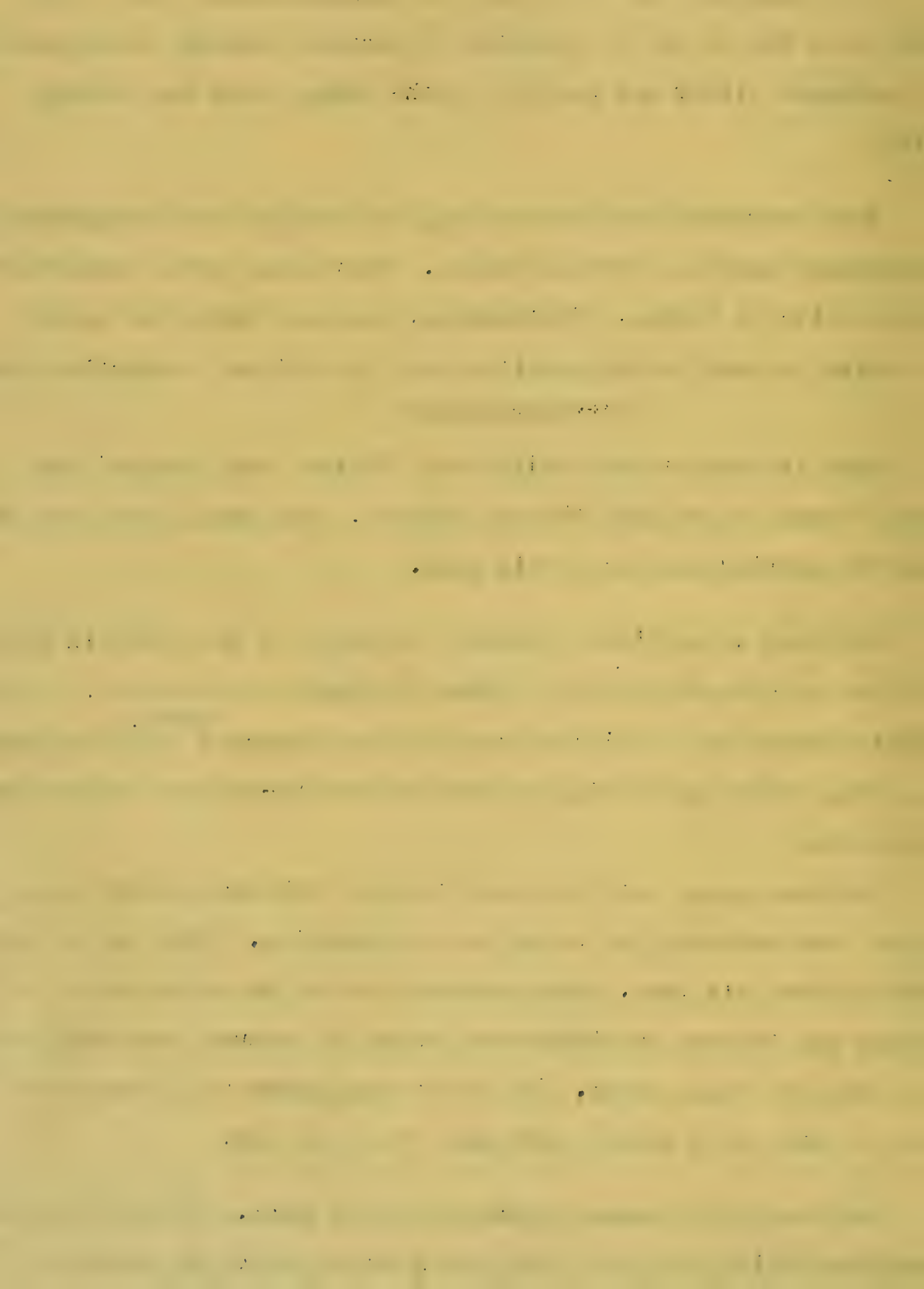
Good emergency pastures do help to increase milk production during midsummer and fall, Nevens states. That means total production for the year will be higher. Furthermore, the cows enter the winter feeding period in much better condition and at a higher production level.

Here is where those family cows, "Daisy" and "Imogen" and "Buttercup," range right into the war picture. Our small herds are the main hope for getting more milk this year.

And when we say "small herds," we mean not only the six million cows in five- to nine-cow herds on farms throughout the country. We are also thinking about the $1\frac{1}{2}$ million cows in the four-cow/^{herds.} And they are thinking, too, about the $4\frac{1}{2}$ million cows in our one-cow and two-cow and three-cow herds.

Dairymen point out that most farmers with small herds separate the milk at home and sell the cream for buttermaking. With the unlimited demand for butter this year, dairy specialists see an opportunity for even one-cow and two-cow and three-cow owners to produce more milk and sell more cream or farm butter. By better management and feeding the cows more, we may get a little more milk from each cow.

Few small herd owners depend on hired labor. So it looks as if the responsibility for more milk this year is up to the member of the



family who tends the cows. Every little bit more from each cow, multiplied by the millions of cows in small herds throughout the country can mean a lot more milk. Remember, every pound of butterfat produced by the family cow above the amount the family needs can have a part in the war.

Our attention was called recently to a farmer who followed the practice of making a careful inspection of his livestock and buildings before he retired each evening. He made the mistake, however, of completing this chore by filling the fuel tank on his tractor so he would be ready for the next day's activity. An open lantern was used. One evening he set the lantern on the ground where the fumes settled and ignited, resulting in a serious fire. Gasoline should not be handled wherever there is an open flame. The danger is too great.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of_____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

Speaking time: 4½ minutes

February 4, 1943

(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: Here again is the ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

First, a note on swine equipment.

When farrowing quarters are used successively for different groups of sows and their litters, it is possible to increase greatly the effectiveness of such equipment. Elmer Larson, Knox County, moved his first 15 sows and litters out of the central house to one end of a straw shed in the clover field. Then the next 15 sows were accommodated in the farrowing house. A partition had been put in the straw shed and a fence was built from it across the field. When the youngest of the next lot of litters were a few days old, all of them were moved to the other end of the shed. In this manner each lot of 15 sows and their pigs had half of the 16 x 42 feet shelter, and the youngest pigs were not robbed by those two weeks older.

On some farms the same farrowing quarters are used for different lots of sows at intervals of about two months. When one lot of pigs is ready to wean, the next sows to farrow are moved in. Two or three groups of sows, each having two litters a year, will produce four to six lots of pigs of as many different ages on some of these farms.

Of course, the pigs thrive better if those of different ages are kept separate permanently, observes E. T. Robbins, livestock extension specialist of the University of Illinois College of Agriculture.

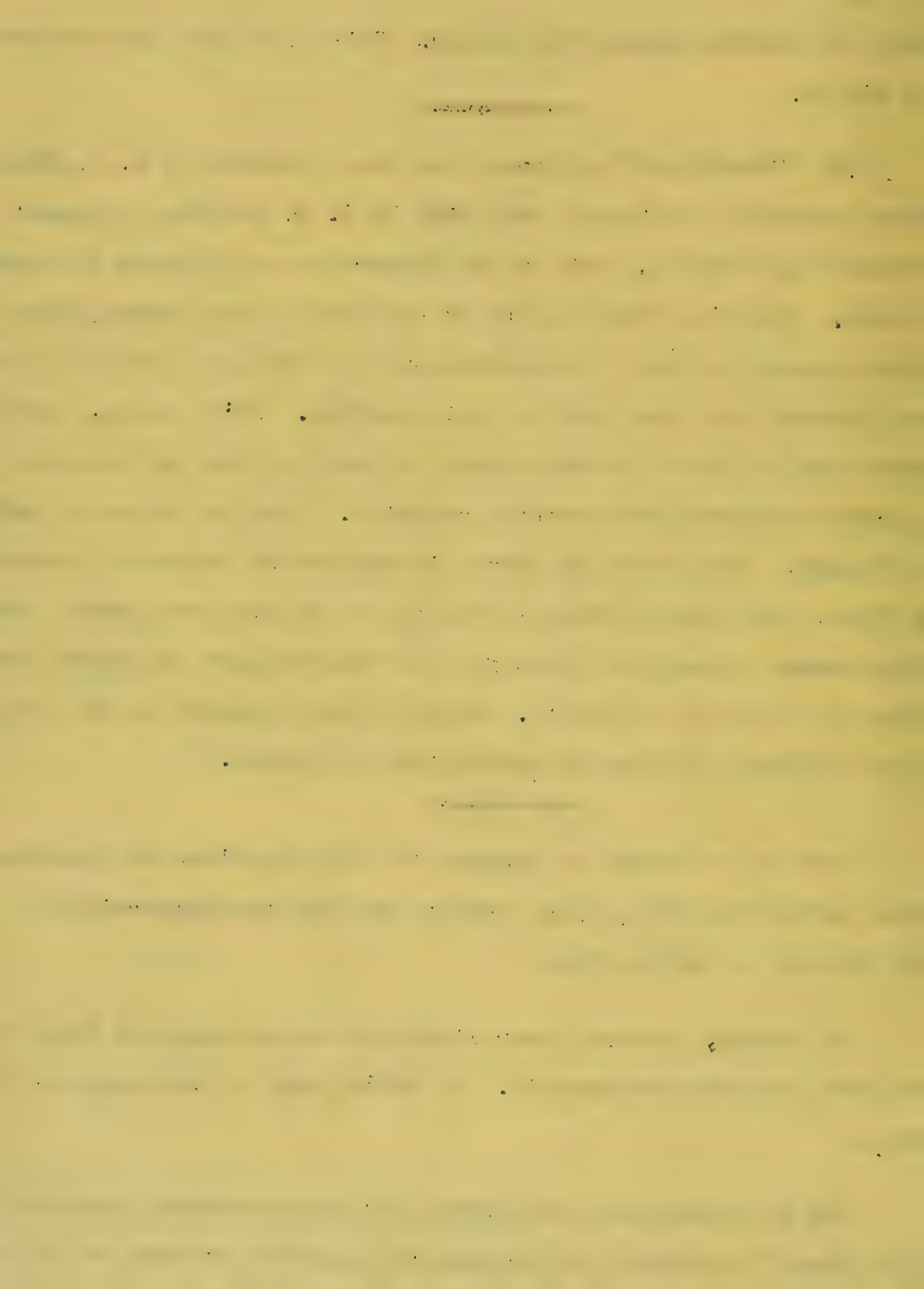
However, because of a lack of fencing, rather large numbers of pigs of different sizes are sometimes put together after weaning. If they have plenty of feeding space, so that all of them get plenty to eat, they keep on thriving during the summer. This plan does not work so well in winter.

The "War-Winner" hog house has been designed by E. T. Robbins livestock extension specialist and built by D. G. Carter, professor of agricultural engineering, both of the University of Illinois College of Agriculture. This hog house is six by six feet at the ground, with three-foot sloping sides, a perpendicular rear end and a slightly sloping roof covered with one strip of roll roofing. It's strong, tight, dry, cheap and suitable for any farmer to build at home with native or milled lumber and available roofing material. They're generally made without floors. The ground is warmer in winter and cooler in summer than a floor. The only problem is the one of keeping the ground dry under the house. Blueprint plans for the "War-Winner" hog house are available at a cost of ten cents. Address your requests to the University of Illinois College of Agriculture at Urbana.

Here are a number of answers to your questions on planning the livestock system for 1943, which come to us from the University of Illinois College of Agriculture.

Of course, planning your livestock system requires some planning relative to your feed supply. So let's look at that angle of the situation.

Can we exceed our corn acreage allotment without penalty? The answer is "yes," providing you produce at least 90 per cent of the war crops that you agree to produce under the AAA program. After that,



you're allowed to grow any crop you choose, and here in Illinois, no doubt, corn will receive first consideration.

What crops could we grow to replace protein supplements? If we didn't have alfalfa or red clover, which are the best ones, soybean hay would probably be the next best crop to supply protein supplements. Lespedeza hay is good in an area where it does well. However, this crop is mostly limited to the southern third of the state as a hay crop.

Can we do anything to make up the protein shortage through harvested grain? Yes. So far as beef cattle is concerned, the whole soybean can be fed satisfactorily at least for periods of 100 days in amounts up to one and one-half or two pounds a head to yearling steers. There might be some difficulty in throwing cattle off feed, but whole soybeans are about equal in feeding value to cottonseed meal.

Supposing we can't buy protein supplement for hogs, what then? Well, don't feed whole soybeans. That produces soft pork. On the other hand, there's the opportunity of using alfalfa meal or ground whole grain and alfalfa. Wheat middlings and even ground wheat and ground oats are all right. All have a higher protein content than corn. If you must conserve on protein supplements for hogs, do that conserving after the pig has reached a weight of 75 or 100 pounds.

What about my dairy cows in case of a protein supplement shortage? In that event, it's even more important that you feed a good legume roughage. The protein content of the grain mixture can be raised by substituting higher protein feeds for lower ones such as soybeans for corn.

That concludes our questions and answers on planning the livestock system for 1943. Let's study our livestock goals and do our best to meet them; plan our feed supply. Remember that cattle, both beef and dairy, can be fed quite satisfactorily from home-grown feeds if protein supplements cannot be purchased. Let's use balanced rations, and when protein supplements are limited, give poultry and pigs first consideration. Give attention to the small details that now are so important in providing maximum livestock production in 1943.

CLOSING ANNOUNCEMENT: And with that we conclude today's ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois, College of Agriculture, and the United States
Department of Agriculture cooperating. H. F. Rusk, Director.
Acts approved by Congress May 8 and June 30, 1914

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ELEVENTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
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(College of Agriculture in cooperation with
(U. S. Department of Agriculture

Speaking time: 5 minutes

February 8, 1943

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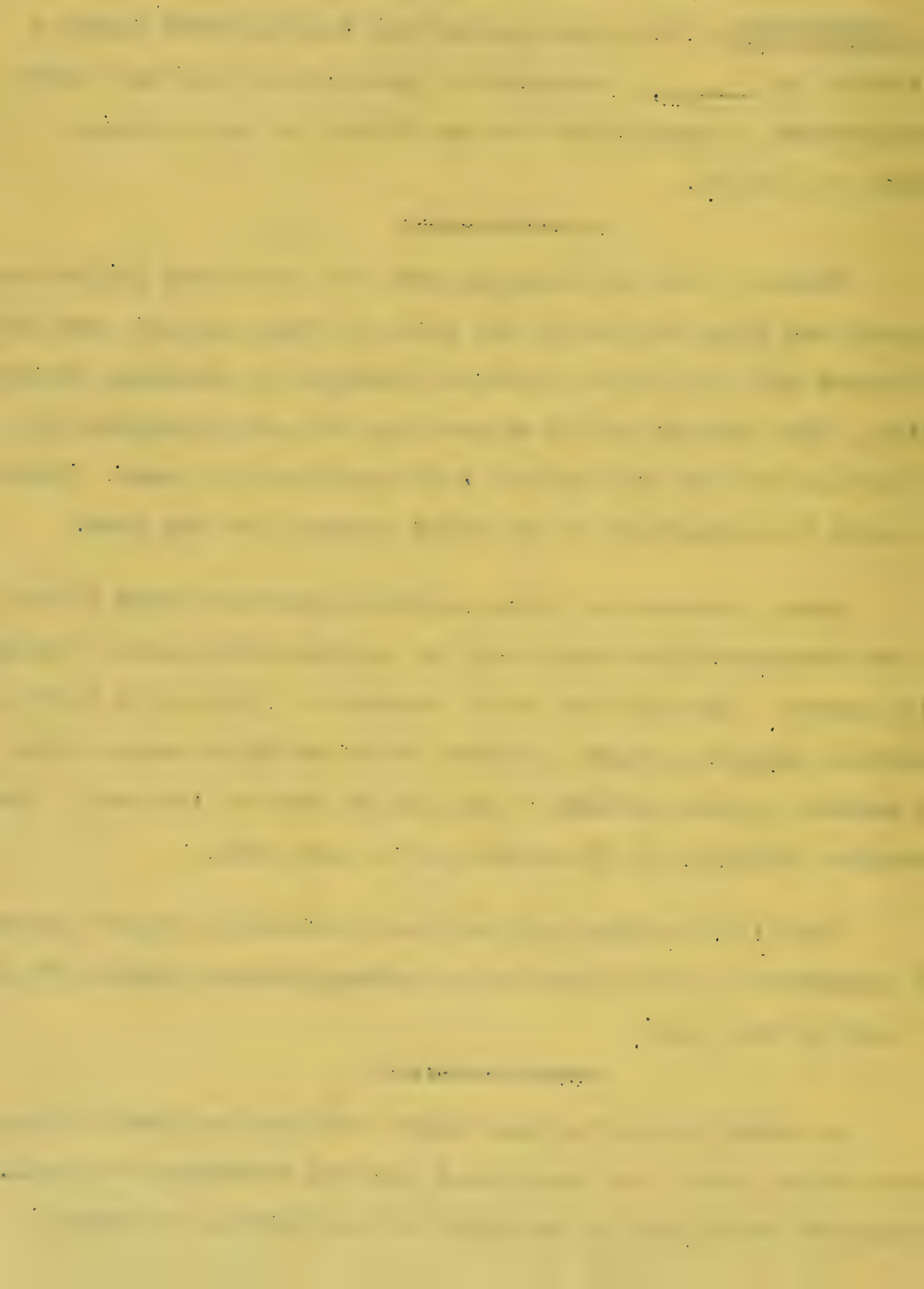
OPENING ANNOUNCEMENT: It's time now for the ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

Soybean goals for Illinois have been increased 375,000 acres. County goals are being revised on the basis of this increase, and individual farmers will be offered incentive payments to encourage maximum production. This payment is \$15 an acre for the acreage between 90 and 110 per cent of the 1943 soybean goal harvested for beans. These payments will be independent of any other payments for the farm.

Sweet potatoes and grain sorghums have been added to the list of war crops, and atlas sorgo will be included with grain sorghums for this purpose. The goal for sweet potatoes in Illinois is 5,000 acres. The incentive payment on sweet potatoes is set at \$50 an acre on the average acreage planted between 90 and 110 per cent of the goal. The grain sorghum incentive is \$8 an acre on the same basis.

The Illinois flax goal has been increased to 25,000 acres and the incentive is \$10 an acre on the acreage planted between 90 and 110 per cent of the goal.

An orderly hatching plan saves both eggs and baby chicks. So order your chicks early this spring and give the hatcheries "a break." Hatcherymen set their eggs on the basis of your orders, you know.



And, while we think of it, raise your 1943 chickens to heavier weights. Heavier chickens mean higher prices and a larger net income. Keep in mind that OPA has announced it will permit farmers to receive at least 115 per cent of parity for the average of all weights.

In producing your chicks this year, let's not overcrowd. If you don't reduce chicks in overcrowded houses, nature will.

Most of us, at some time or another, have been guilty of not doing as well as we knew how. Of course, times have changed and now we must do even better than we know how. I don't know how many of you farm people are listening to me right now, but I'd like to mention something you've always known and yet something many of us never have done. IMMUNIZE PIGS AGAINST CHOLERA. Huge meat needs won't allow loss from disease outbreaks. Save every pig possible. If we could market 80 per cent of all the pigs born instead of 60 per cent average, pork production would jump one-third.

Here's another point. All milk must be quality milk now. Let's do everything we can to keep it clean.

And now a note on field houses for farrowing.

The small one-litter field house used in raising pigs on pasture is very suitable for farrowing quarters also, as shown by the experience of many farmers. The little houses do so well for this purpose that many fine old central hog houses are now used for other purposes entirely, such as shelter for machinery, calves or chickens. E. T. Robbins, livestock extension specialist of the University of Illinois College of Agriculture describes two popular plans for using the small houses.

The easiest way is to scrub all houses early and scatter them at least two rods apart in a field where no hogs have been for a year. The houses and the ground beneath should have a week or more to dry before use. Then the houses are filled about half full of straw. About a week before the first litters are due all the sows are washed on a mild day and turned into the field. The sows are fed together in one place both before and after farrowing, depending upon the sow's instinct to guide her nesting, eating and drinking habits. This plan has been followed for years even for early pigs by J. E. Becker, Rock Island county; F. A. Snodgrass, Henry county; J. T. Willeford, Bond county; Burrus Brothers, Morgan county; E. M. Seymour, Adams county, and others. The past year Roger Patterson, Winnebago county, changed to this plan and reports surprisingly good results.

On some farms using these scattered houses it has become the custom now to separate the sows by electric fence, allowing about eight to the acre. Clarence Hart and Vernon Pomeroy, Lee county; Gerald Smith, LaSalle county, and Glenn Ferrell, Shelby county do it this way and report about eight pigs a litter raised now as compared with seven previously. This plan works well on the University of Illinois farm.

For early farrowing many men line the little houses up in a solid row and separate the litters by low panels of fencing while the pigs are small. These men have more work to do and usually have to contend with mud in the small lot, which is perhaps 6 by 12 feet, in which the sow and litter are confined for a week or two.

Whichever way it is done, the one-litter house system usually results in raising at least seven pigs a litter if the sanitation precautions are reasonably complete. It is becoming more and more common not to shut the sow in the house at any time. If she is shut in, the

house becomes wet and nasty. If she is free the nest keeps clean and much drier. Dry bedding is very essential for little pigs in cold weather.

Of course, we don't grow many peanuts here in Illinois.

But if you're wondering why all the fuss about them lately (government quotas and so on), here's something to think about the next time you stop around the corner to pick up your supply for the evening show.

(Paging Emily Post!)

It is because the boys in the balcony back in the old home town theatre-----who used peanuts for ammunition on the bald-headed men below-----are using peanuts for ammunition now. But this time, they're "playing for keeps." The oil from peanuts is a war weapon. It's used in making explosives. Glycerin, used in nitroglycerin, is extracted from peanut oil.

Peanut oil is also used in making antifreeze, as well as medicines, and is substituted for cocoanut oil, palm oil and tung oil. Peanut hay is a good source of protein, and the meal left after the oil has been extracted from the nuts makes a high protein feed for livestock.

And here I thought all along that peanuts were something we only ate out of a sack.

Now as a parting suggestion, if your wood pile is under the clothes line move one or the other. In chopping this evening's kindling, it's no trick at all to have the ax catch the wire on the downward stroke and chop the side of your face off.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
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Acts approved by Congress May 8 and June 30, 1914

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TWELFTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 4 $\frac{1}{4}$ minutes

February 11, 1943

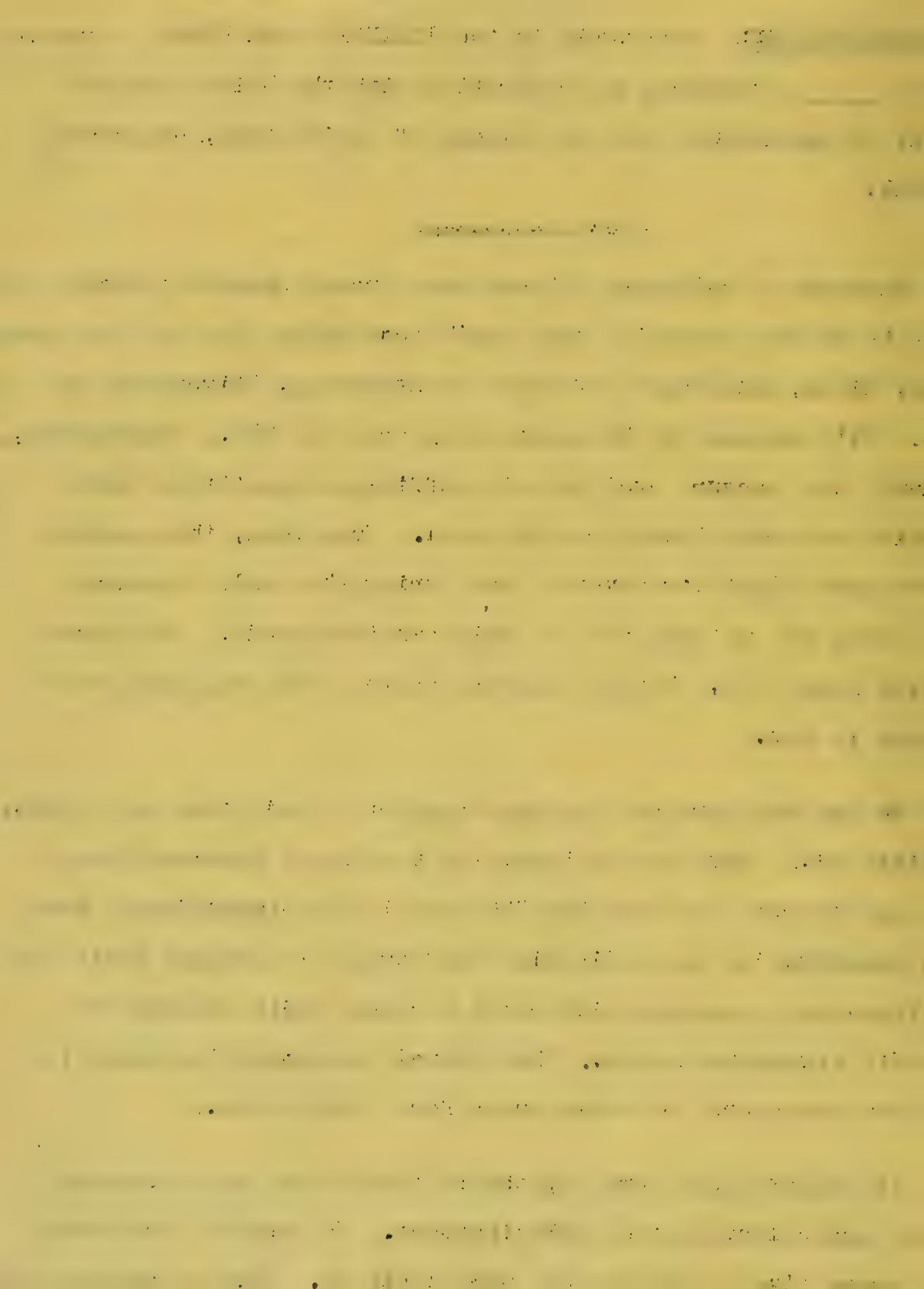
(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: Here again is the ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

Hundreds of colonies of bees have already starved to death or will soon be at that point if they aren't fed within the next few weeks, says V. G. Milum, assistant professor of entomology, University of Illinois. It's because of the short honey crop in 1942. Furthermore, there won't be nectar available in sufficient quantities until early fruits and dandelions bloom in April. Even then, the weather must favor good flight for several days during the early blooming period if bees are to take care of their own food needs. Following this spring honey flow, there's another dearth until the main honey flow starts in June.

We can not overlook the importance of bees in the war effort, Milum points out. They produce honey to supplement decreased sugar supplies and beeswax for more than 350 uses in war industries. Bees are also essential in the pollination of flowers to produce fruit and seeds. Therefore beekeepers will want to check their colonies to determine if stores are needed. The federal government has made it possible for beekeepers to obtain sugar for feeding bees.

At present beekeepers may obtain from their ration boards 10 pounds for each colony as the 1943 allotment. In case of necessity they may borrow five pounds of the 1944 allotment. Having obtained the



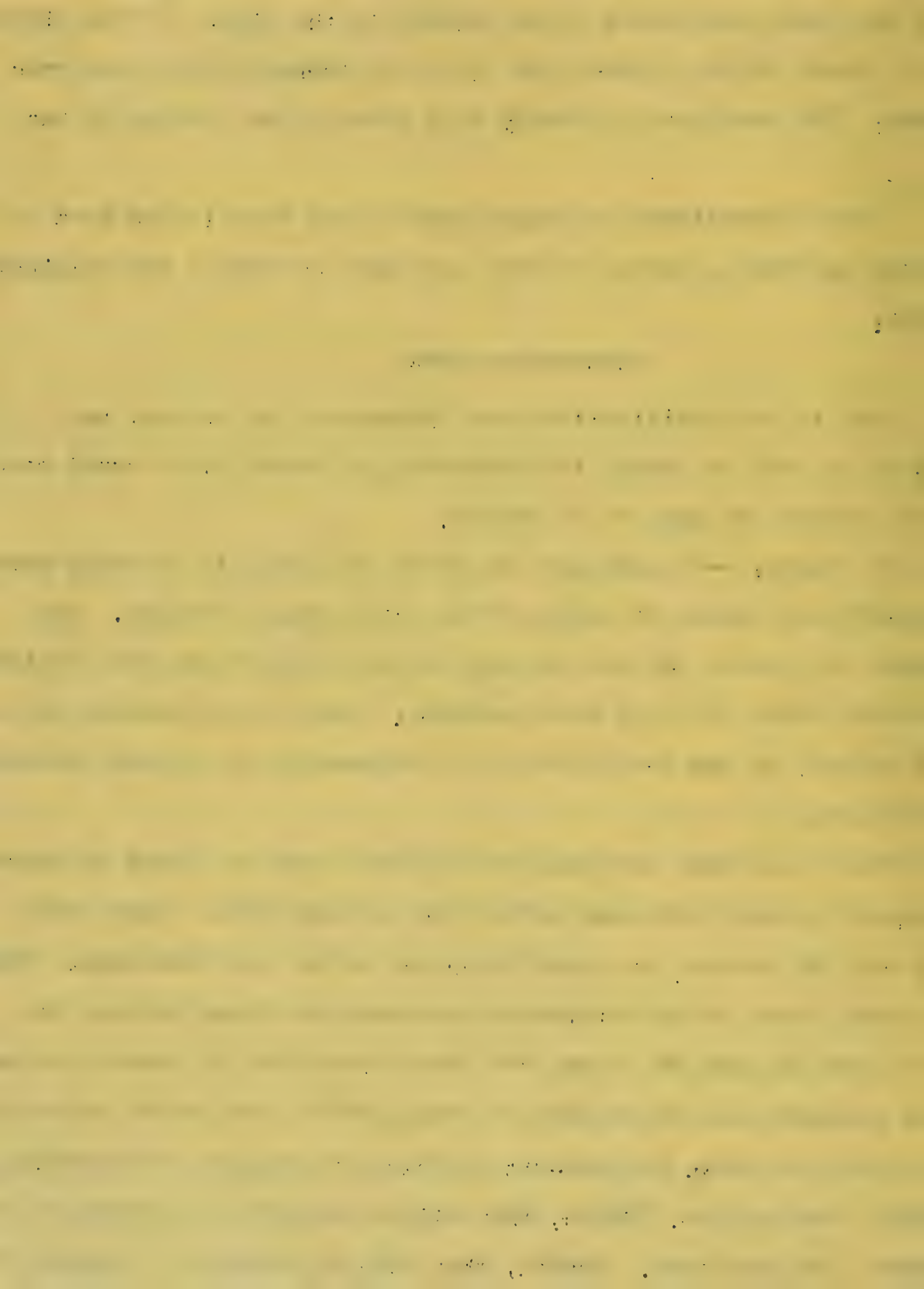
sugar, Milum says to make it into a syrup. Mix two parts of sugar with one part of water and boil. The syrup may be fed in shallow pans set directly on top of the frames of the hive. It also may be placed in friction top pails with small holes punched in the lids. If the hives are level, these pails of syrup may simply be turned upside down over the frames. The pressure of gravity will prevent the leaking of the syrup.

A small investment in sugar given to the bees in the form of sugar syrup may mean a return of 1000 per cent or more on the original investment.

This is 4-H mobilization week throughout the nation, and Illinois is all out to double its membership of some 32,000 rural boys and girls between the ages of 10 and 20.

Of course, 4-H club boys and girls are going to be doing more work in different fields of endeavor than they would normally. And that's just the reason why the victory service project has been designed to give them credit for this extra service. Here it is outlined for us by Ralph Taylor, of the 4-H staff at the University of Illinois College of Agriculture.

First, all boys and girls between the ages of 10 and 12 years are required to spend 120 hours with farm and home work. That isn't much, is it? Of course, the hours increase as the age increases. Two hundred forty hours is the minimum requirement for those between the ages of 13 and 15, and 360 hours for those from 16 to 20 years of age. Then club members will be required to take part in one health activity such as first aid work, keeping-fit exercise or studying and checking their daily food habits. Third, they will be expected to attend at least three local club meetings. Fourth, they will be required to appear at



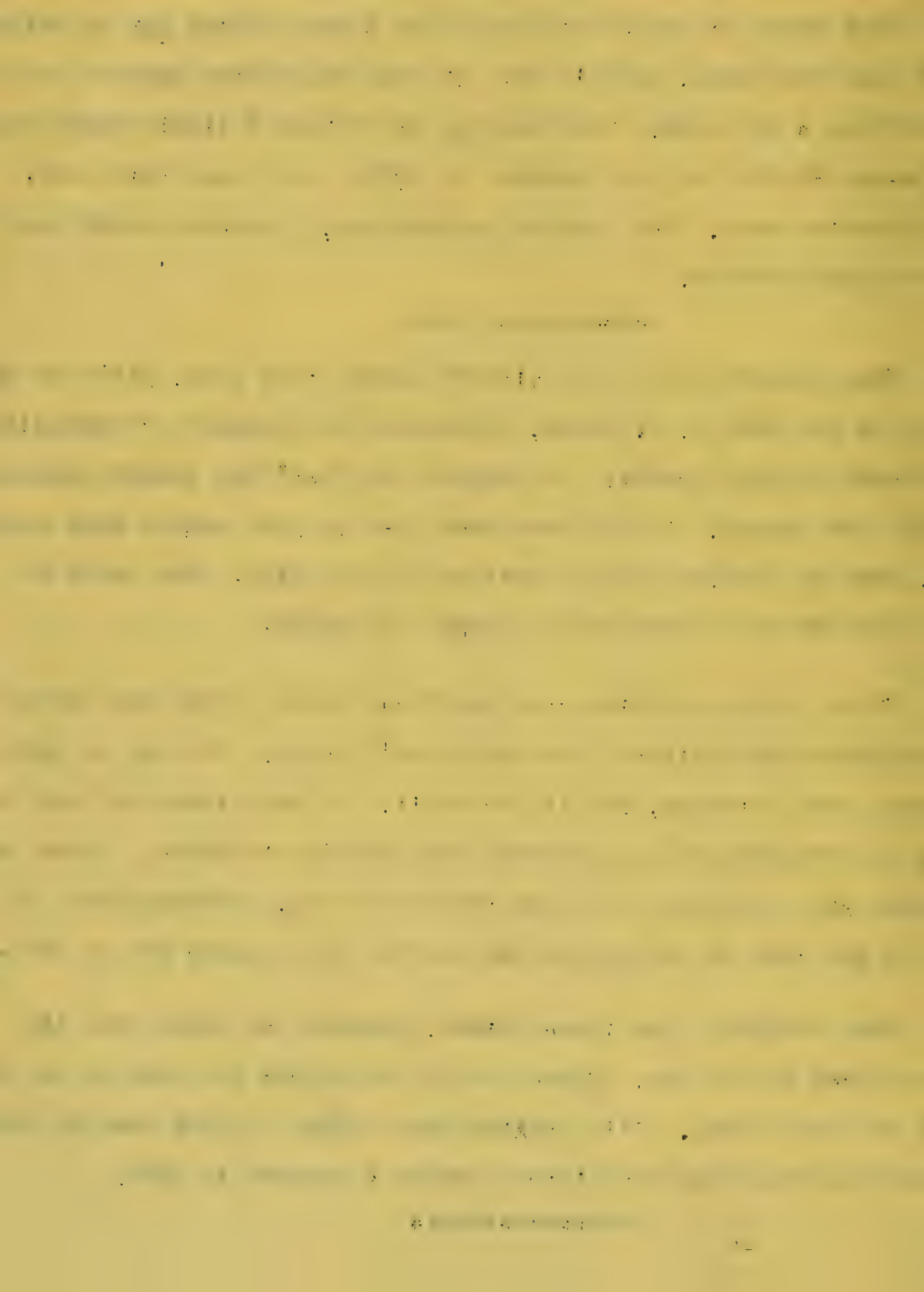
least once on their local club program, and last of all, they must complete their record book in this project and turn it in to their local club leader.

That makes it rather difficult for a boy or girl not to belong to a 4-H club this year, doesn't it? It only takes five members and a leader to form a 4-H club. What can you do to help Illinois reach the goal of about 65,000 4-H club members in 1943? Let's act this week, 4-H mobilization week. For further particulars, see your county farm adviser or home adviser.

When insects invade our victory garden this year, let's be up and ready to go, says H. B. Petty, extension entomologist of the Illinois State Natural History Survey. He suggests we "get" the insects before they "get" the garden. It may mean some hand to hand combat with some of them, such as picking potato beetles off the vine. But let's be prepared for the season and not be caught off guard.

While you're ordering your vegetable seeds, order the amount of insecticides and equipment you think you'll need. You may be able to purchase some rotenone, but if you can't, you can always go back to the good old standby of lead arsenate and nicotine sulphate. Three or four pounds will probably be enough for most of us, although that all depends on the size of our garden and how bad the insects are in 1943.

When ordering your insecticides, remember to check over the duster you used a year ago. Maybe some of us forgot to clean it or even store it in a dry place. It's looking after minor details such as this right now that will make our victory garden a success in 1943.

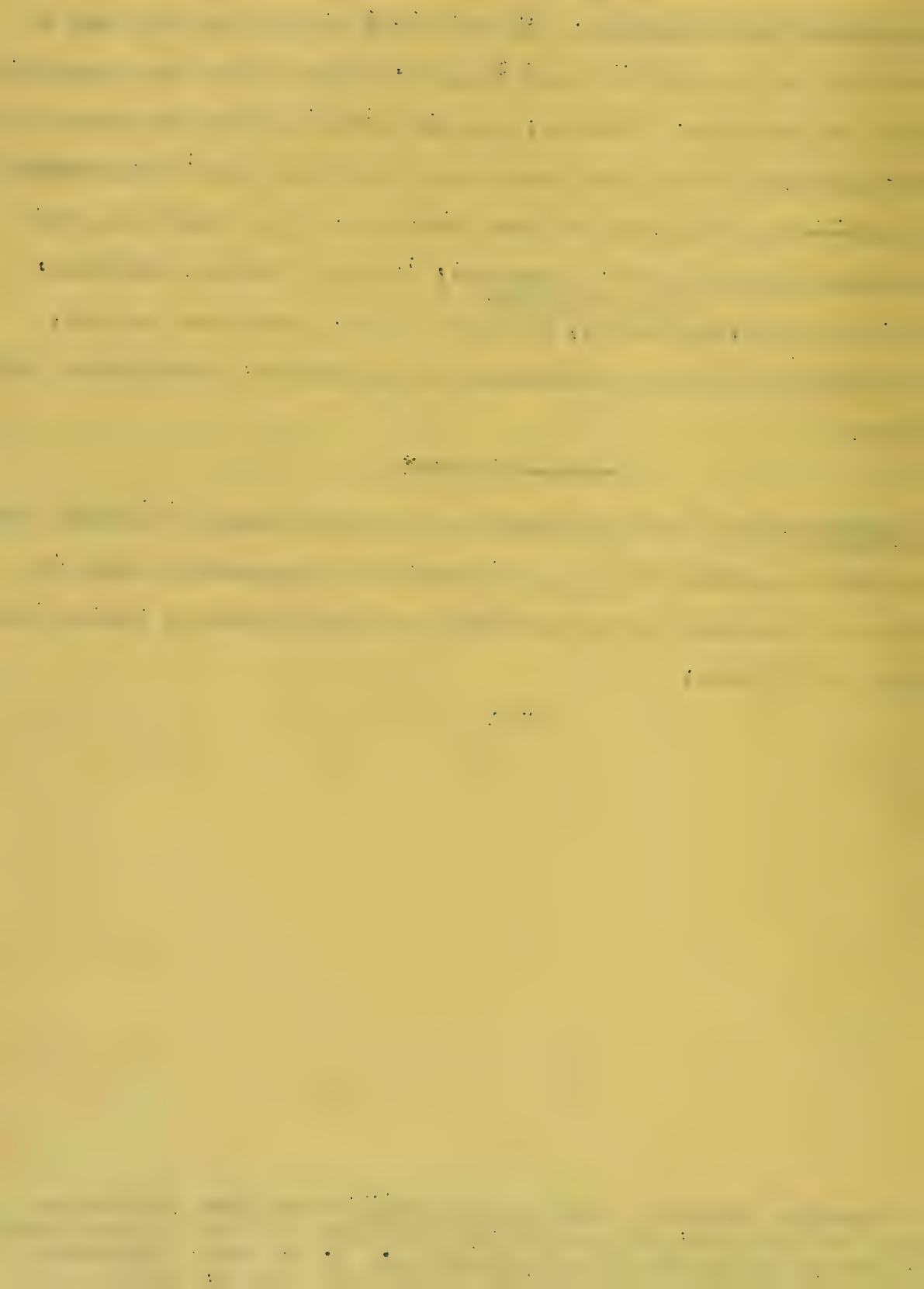


In planning your victory garden this year, you may be interested in hearing a review of the non-essential crops listed by the U. S. Department of Agriculture. Of course, it doesn't mean you can't plant those considered non-essential. In fact that may be the only way a lot of us will get them if we want them this year, since the commercial supply will be cut down. However, you may wish to plant the essential ones first and then finish out with those which now aren't considered so important---but still may be your favorites. Here they are, the non-essential crops for 1943: eggplant, iceberg lettuce, kohlrabi, okra, radishes, cucumbers, horseradish, garlic, rhubarb, leeks, pimentos, squash, pumpkins, bleached celery, artichokes, hops, popcorn, cantaloupes and watermelons.

CLOSING ANNOUNCEMENT: And with that we conclude today's ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Acts approved by Congress May 8 and June 30, 1914



FOURTEENTH
ILLINOIS FARM FLASH(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of AgricultureSpeaking time: 3 minutes

February 18, 1943

(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: Here again is the ILLINOIS FARM FLASH presented, as a public service of _____, in cooperation with the U. S. Department of Agriculture and the College of Agriculture, University of Illinois.

Illinois orchardists who have been depending upon wild colonies of bees for pollination may find it advisable to make arrangements for the purchase or rental of bees in 1943, says V. G. Milum, assistant professor of entomology, University of Illinois College of Agriculture. Where colonies kept by neighbor beekeepers have been the source of honeybee pollinators, it would be well to make a check to see that bees will be present this year. It's possible that some beekeepers can still save many of their colonies by feeding sugar syrup. In the case of colonies already dead from starvation, they may be replaced by three-pound packages of bees purchased from southern shippers, provided the orders are placed at an early date.

Illinois farmers who have contracted with the government for growing hemp in 1943 can obtain a number of helpful suggestions in circular 547 called "Hemp, An Illinois War Crop." It was written by J. C. Hackleman and W. E. Domingo, agronomists, University of Illinois College of Agriculture. The circular contains information on soil requirements, preparation of the seedbed, time and rate of seeding and harvesting. Copies of circular 547 are available for free distribution from your county farm adviser or you may address your request to this station. Ask for circular 5-4-7.

Here are a number of suggestions which will help us to continue to grow sweet clover in Illinois in spite of the sweet clover weevil. Our authority is M. D. Farrar of the Illinois State Natural History Survey.

Farrar suggests that the 1943 spring seedings of sweet clover should not adjoin fields seeded in 1942, in areas where damage has occurred in past years. However, where this is necessary, he mentions that agronomists have recommended seeding a mixture containing six pounds of sweet clover, three pounds each of red clover and timothy and one-half pounds of alsike. Timothy may be omitted from the mixture in areas where the use of it might cause white grub or other insect troubles. In the central and southern portions of the infested area, five pounds of lespedeza may be substituted for timothy. This will insure a legume rotation, should the weevil destroy the sweet clover. It's well to seed all sweet clover a little heavier than usual in areas infested with weevil. From 10 to 15 pounds of seed to the acre on a well-prepared seedbed should give a good stand of sweet clover, even with some damage to the young plants.

The income tax deadline---March 15th---is close at hand. And this year, great numbers of farmers will file income tax returns---the first most of them have ever made.

The new income tax dips into lower income brackets than before and carries higher rates. But it's a big war we're fighting, and our tax money is one of the biggest weapons against Hitler and Tojo. It is needed to win the war and bring our boys back home.

All eligible farmers are urged to get their income tax blanks early and to study them carefully. Returns must be filed by single

persons who earned as much as \$500 gross income last year. Married persons living with husband or wife must file returns if their gross income was \$1200 or more. Even if the taxpayer's deductions make it unnecessary for him to pay any tax whatever, returns must be filed if gross income reached these levels.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
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Acts approved by Congress May 8 and June 30, 1914

DEPARTMENT OF CHEMISTRY

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
CHICAGO, ILLINOIS
JANUARY 19, 1924
TO THE EDITOR OF THE JOURNAL OF THE AMERICAN CHEMICAL SOCIETY
FROM THE DEPARTMENT OF CHEMISTRY, UNIVERSITY OF CHICAGO
SUBJECT: [Illegible]

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FIFTEENTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 4 minutes

THE LIBRARY OF THE February 22, 1943

(FOR BROADCAST USE ONLY) 6 1943

OPENING ANNOUNCEMENT: Here again is your ~~ILLINOIS FARM FLASH~~, a public service of , presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

The twenty-second annual meeting of the Eastern Illinois Fruit Growers' Association will be held in Mt. Vernon on Thursday of this week, February 25. Included in the topics for the day's discussion are the fruit goals for 1943, plans for meeting the labor shortage, the apple and peach spray schedules, the place of strawberries in the victory program and latest information on materials for this year. A number of speakers from the University of Illinois College of Agriculture appearing on the program include M. J. Dorsey, head of the department of horticulture, V. W. Kelley, A. S. Colby, Dwight Powell and P. E. Johnston.

Illinois farmers will want to make every possible effort to harvest beans when weather conditions permit, says J. C. Hackleman, professor of crops extension. However, the moisture content of the beans harvested now may be too high to permit safe storage on farms. That means we'll want to move soybeans through local elevators as rapidly as possible. Hackleman states that farmers who have been combining beans for the past few days have been surprised at the quality and prices received. Some found beans tested as low as 17 to 20 per cent moisture, only 25 to 30 per cent damage and had a market value of \$1.25 to \$1.35. So let's harvest those beans. We need the oil and protein feeds from them.

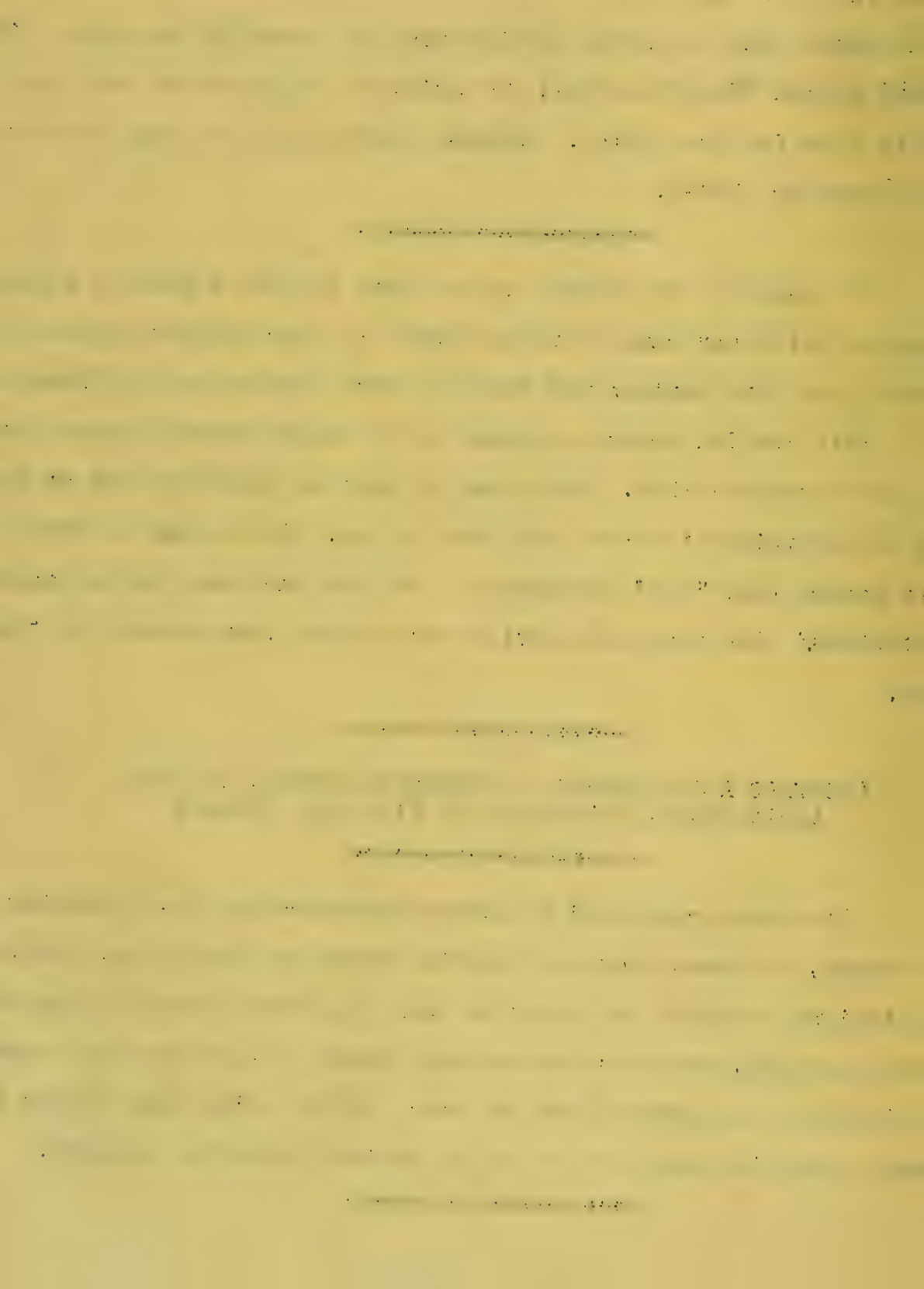


Clover is the backbone of the Illinois system of soil improvement and the key to the whole production program. But most soils are too acid for clovers. The first step, then, is to test the soil for acidity. Find out where lime is needed and how much is needed to the acre. Circular 346 called "Test Your Soil for Acidity" tells how to make the test. A copy is free for the asking. Address your request to this station. Ask for circular 3-4-6.

Speaking of circulars, if you want to have a look at a few of the insects which may cause you some grief in your Victory garden this year, ask your farm adviser for that two-page leaflet called "Insecticides." This leaflet shows a picture of 15 common garden insects and tells how to control them. One pound of dust or three gallons of spray should be sufficient to treat 350 feet of row. Let's plan to "get" those insects before they "get" our garden. Ask for the free leaflet called "Insecticides." See your farm adviser or address your request to this station.

(FORWARD ALL REQUESTS TO EXTENSION EDITOR, 109 New
Agriculture, University of Illinois, Urbana)

Foresters recommend selective cutting--that is, selecting mature trees, or trees above a specified diameter limit only, leaving young straight trees in the woods so they can grow to good sawlog size. With wise cutting, we could have enough timber to meet the war needs and timber left for the years after the war. On the other hand unwise cutting may leave the land as bare as old Mother Hubbard's cupboard.



No doubt, you have noticed the recent drop in egg prices. Now don't get alarmed by this or sell your hens or cut down your egg production because of it. This is only a seasonal decline and agricultural economists say that in the spring, prices for eggs will go much higher than the past spring.

The price support program for 1943, assures an average U. S. farm price of at least 30 cents a dozen for eggs in the spring, when production is large, and an annual average price of not less than 34 cents. This is about 15 percent higher than the average prices in 1942.

As a result, unless price ceilings on feed are permitted to rise, the price of eggs compared to the price of feed probably will prove the most favorable to poultrymen on record.

That means that if feed prices remain at present levels you'll be able to buy more feed with a dozen eggs than ever before. This would make heavier feeding profitable, and heavier feeding increases egg production.

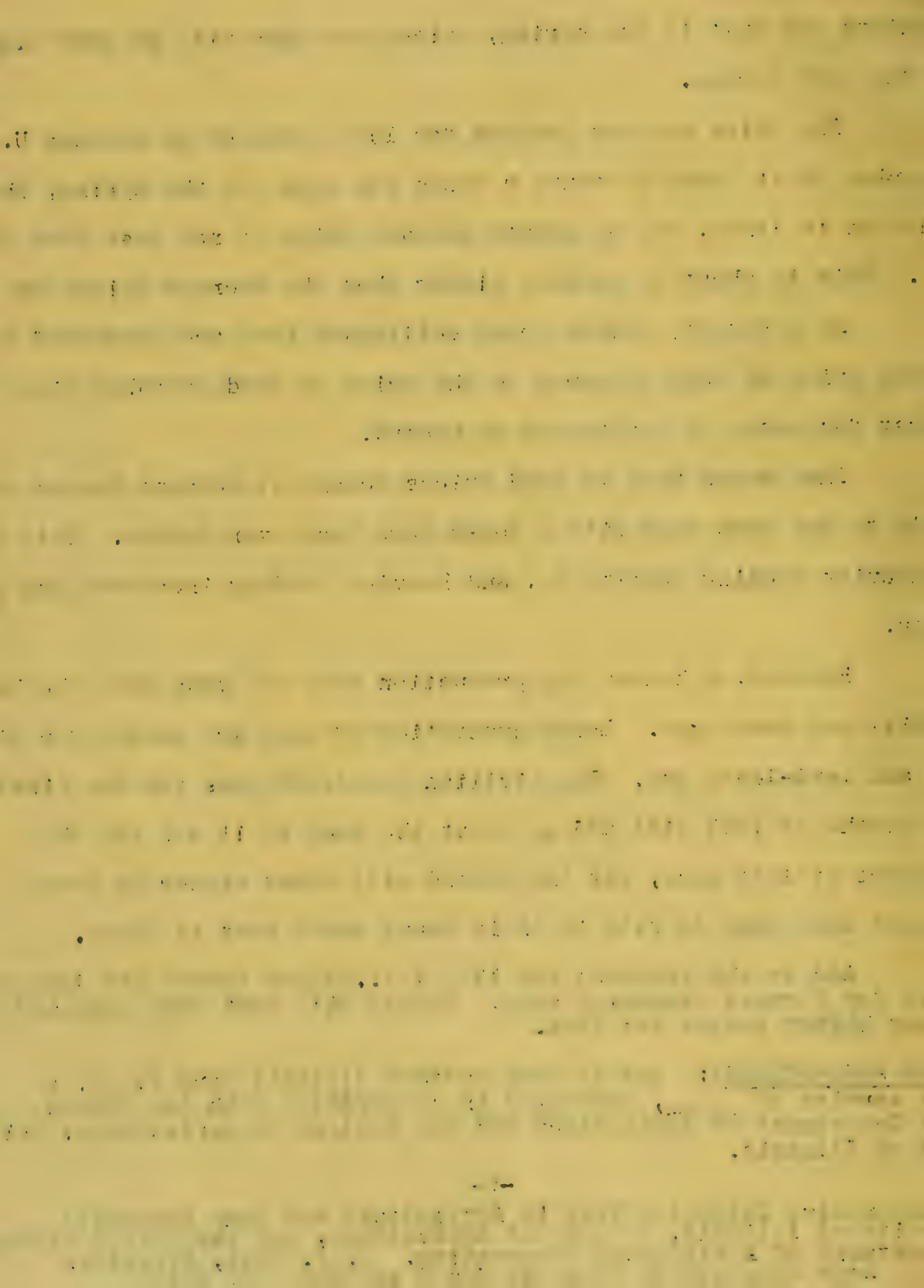
However, a banner egg production does not mean that the housewife will get more eggs. Large quantities of eggs are needed for military and lend-lease use. The civilian supply of eggs for the first three months of 1943 will add up about the same as it was for the first part of last year, but the demand will mount higher as people will want more eggs to fill in their menus where meat is short.

And so the forecast for 1943 is...higher prices and larger incomes for farmers producing eggs. People will want more eggs and will pay higher prices for them.

CLOSING ANNOUNCEMENT: And so ends another Illinois Farm Flash, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics
University of Illinois, College of Agriculture, and the United States
Department of Agriculture cooperating. E. P. Rusk, Director.
Acts approved by Congress May 8 and June 30, 1914



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(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture

SIXTEENTH
ILLINOIS FARM FLASH

Speaking time: 4 minutes

February 25, 1943

(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: (:10) Here is today's ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

(1:30) AMERICAN FRUIT ABROAD is our first topic for discussion, so let's follow our fruit overseas and hear how it's being used a little differently. Food distribution officials are buying and sending small quantities of fruit juice in a concentrated form to our vitamin-short allies.

To save as much ship space as possible, orange, grapefruit and lemon juice are put through a sort of second squeeze. That is, they are concentrated by evaporation under vacuum at low temperature. The result is still pure fruit juice. No sugar or preservative is added. But one gallon of concentrated orange juice, for example, is equal to about seven gallons of the fresh orange juice. And the officials say the concentrated juice retains to a remarkable degree the valuable vitamin C for which fresh orange juice is noted.

When the concentrate reaches Great Britain, the British add water to the concentrate and so make it again into a pure fruit juice drink. Other than the allotment to the armed forces, the concentrate is distributed mainly to children less than five years old. Each family has an allotment according to the number of children.

The plants preparing the citrus concentrates in this country are located near where the fruit grows in California, Florida and Texas. Plants dehydrating various other fruits—bananas, tomato juice

and apple nuggets--are being set up in various other parts of the country. Already some of these fruits are appearing on menus of the armed forces abroad. Already some of the boys in the armed forces are reported eating ice cream made of banana flakes and drinking tomato juice which made the trip across in the dehydrated form.

(:55) PIG BROODERS PLEASE PIGS, says E. T. Robbins, livestock extension specialist, University of Illinois College of Agriculture. He says there's widespread interest in pig brooders for small field houses. For example, a pig brooder for a small A hog house has been designed by Martin Berger, a 4-H club boy in Grundy county. Berger demonstrated it to visitors on the county tour a year ago. He had a 150-watt lamp mounted under a reflector over an eight-inch round hole in a shelf 13 inches wide and three feet long, fastened ten inches above the floor in one corner of the A house. Because of the slope of the roof, the floor space covered was about 20 inches wide and gave plenty of room for a litter of pigs. A canvas curtain conserved the heat. Four A houses so equipped had young litters in them, and the little pigs promptly scampered back under the heat after they had been removed for display on a chilly March day. Robbins points out that electric pig brooders, such as that made by Martin Berger, add one or two pigs to the average number of hogs raised in winter or early March litters.

(:45) STRAWBERRIES are something many of us may well include in our victory garden this year. Of course, we can't expect to harvest a crop until 1944 unless we plant some everbearing variety such as Rockhill----or Wayzata, as it's sometimes called. However, this victory garden business isn't a one year affair, so we can plan for a part of next year's small fruit supply by setting out a few strawberry plants

this spring. Strawberries are rich in vitamin C, ranking with citrus fruits and above tomatoes. They aren't difficult to grow, if you follow a few do's and don'ts. These have been arranged for the home gardener in a two-page leaflet called "Strawberries." It was written by A. S. Colby, specialist in small fruits, University of Illinois College of Agriculture. A limited supply of leaflets is available for free distribution. Address your request to this station. Ask for the free leaflet on strawberries.

(MAIL REQUESTS TO EXTENSION EDITOR)

(:30) RED CLOVER INOCULATION is particularly important where clover crops have not been grown successfully in recent years, says M. D. Appleman, agronomist of the University of Illinois College of Agriculture. However, land which is too sour to support growth of clover is too sour to give the best results from inoculation. So use it on seed sown on land recently limed. Read the directions on the bottle of inoculant and follow them carefully. Use cold water and mix well. Remember to use it right before you plant. It won't do any good to use it and re-sack the seed for sowing later on. Inoculation is good crop insurance.

(:10) Now as a parting thought for the day, remember you don't stand much of a chance with a mad bull in a 40-acre field. Even if the bull is gentle, it's a lot safer not to let him have the run of the place.

LOSING ANNOUNCEMENT: (:10) And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Acts approved by Congress May 5 and June 30, 1914

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SEVENTEENTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture

Speaking time: 5:20 minutes

March 1, 1943

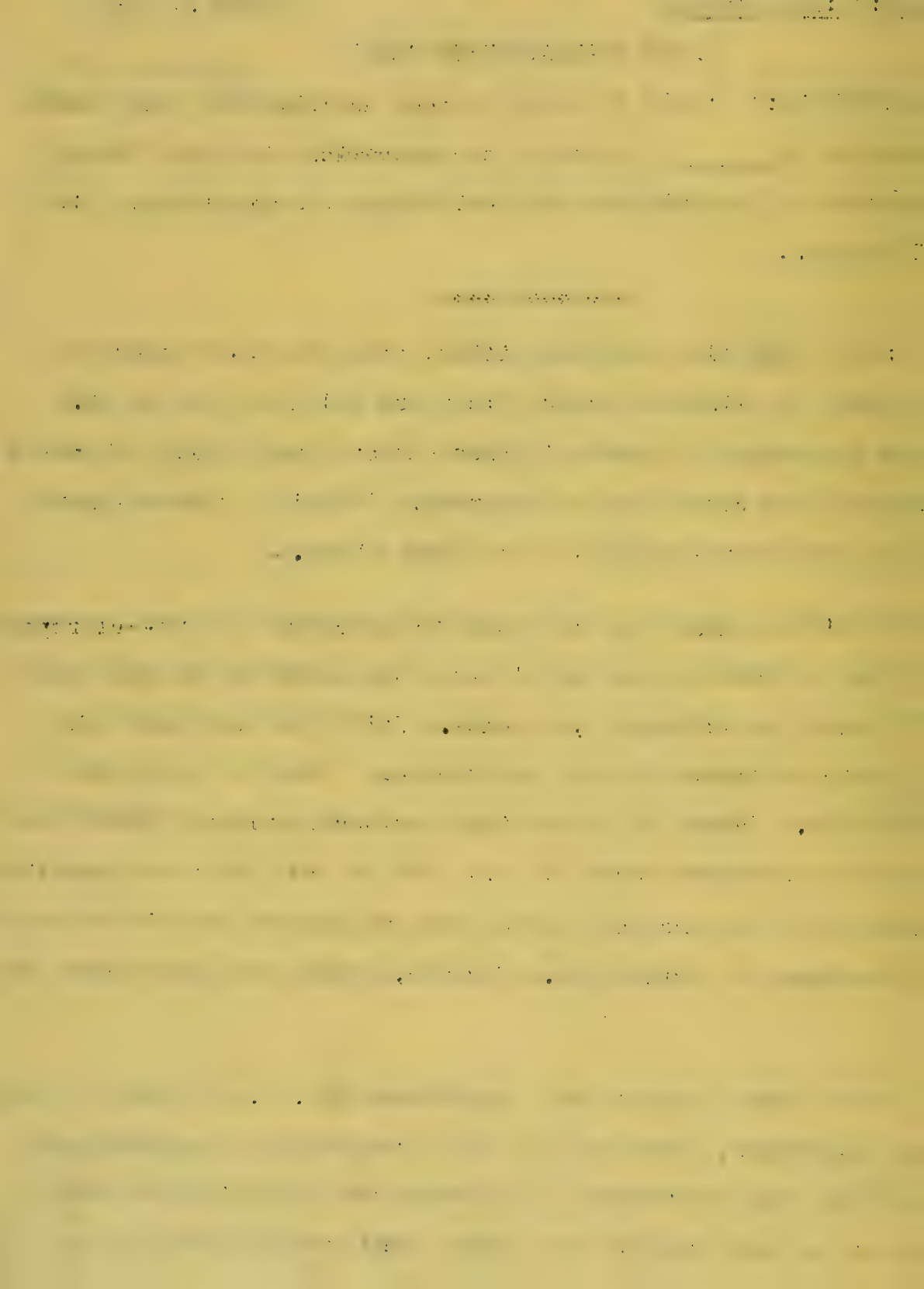
(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: (:10) We bring you now the ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

(1:30) HEMP will help hang Hitler, and the 45,000 acres of hemp to be grown by Illinois farmers this year will help do the job. The Japanese occupation of certain islands cut off our supply of Manila and Java sisal fiber from which we made rope. So we'll grow at least a part of our own supply in 1943 in the form of hemp.

It isn't so much the necessity of replacing the worn-out rope in the hay fork or that in the swing 'neath the shade of the old apple tree. We'll make the old rope do, somehow. It's the fact that each battleship requires almost 34,000 feet of rope. That's roughly six and one-half miles. Each 10,000-ton light cruiser requires 35,000 feet of rope, while a destroyer needs 10,000. Add to this the huge quantities of rope required by the merchant marine and you can see why we're excited about this business of growing hemp. However, there are other uses for hemp.

Here's just a sample list contributed by W. L. Burlison, head of agronomy department, University of Illinois College of Agriculture. He says hemp has been cultivated as a barrier for prevention of corn pollination, as a weed fighter, for paper, fuel, and kindling, as a green manure crop and for stable bedding. Bird food, hemp seed cake, meal and oil are still other uses for hemp. Experimentally, it has been

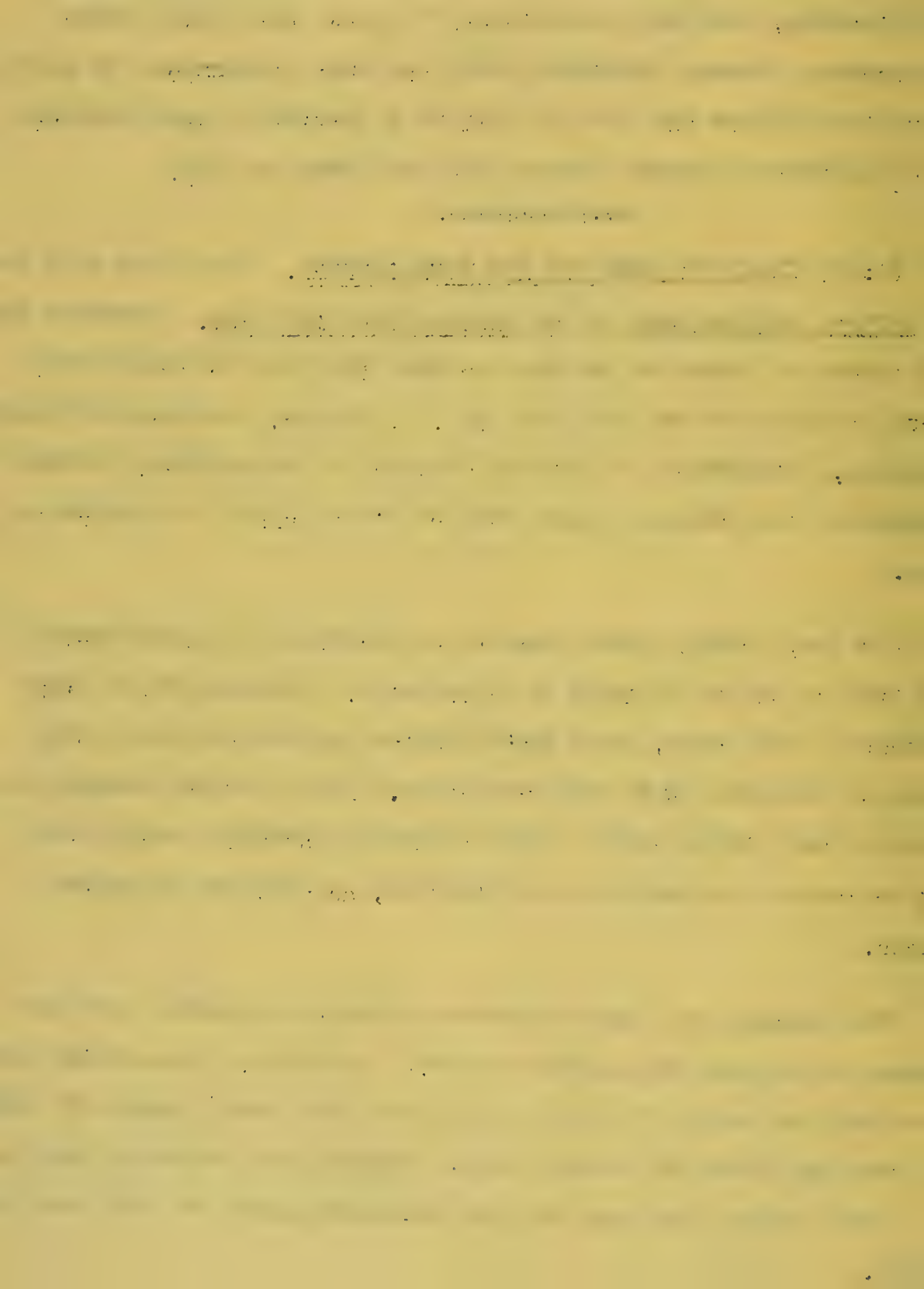


tried in wire rope centers and nitrocellulose. It's used for twine in brooms, binder twine, armature winding thread, paper, fire hose, matting, mattress stitching, sack and upholsterers' twines, shoe sole sewing thread, parachute flares, thatching roofs and shot lines--just to mention a few. Burlison points out that it will be a profitable and patriotic venture for northern Illinois farmers who grow hemp in 1943.

(1:15) CARE FOR YOUR COW FOR YOUR COUNTRY. Feed them well in the barn before turning them out on pasture the first day. Remember to limit the number of hours at pasture for the first two or three days, too. These precautions are outlined by W. B. Nevens, professor of dairy cattle feeding, University of Illinois College of Agriculture, to keep milk production from dropping when cows are first turned on pasture in the spring.

You see, fresh, green grass is so palatable in early spring that cows fill up on it if given an opportunity. Because of the high water content of the grass, cows don't receive enough nutrients from grass alone to maintain high milk production. And a sudden change from the feeding of hay, silage and a grain mixture to pasture feeding only is likely to cause a sudden drop in milk flow, as well as digestive disturbances.

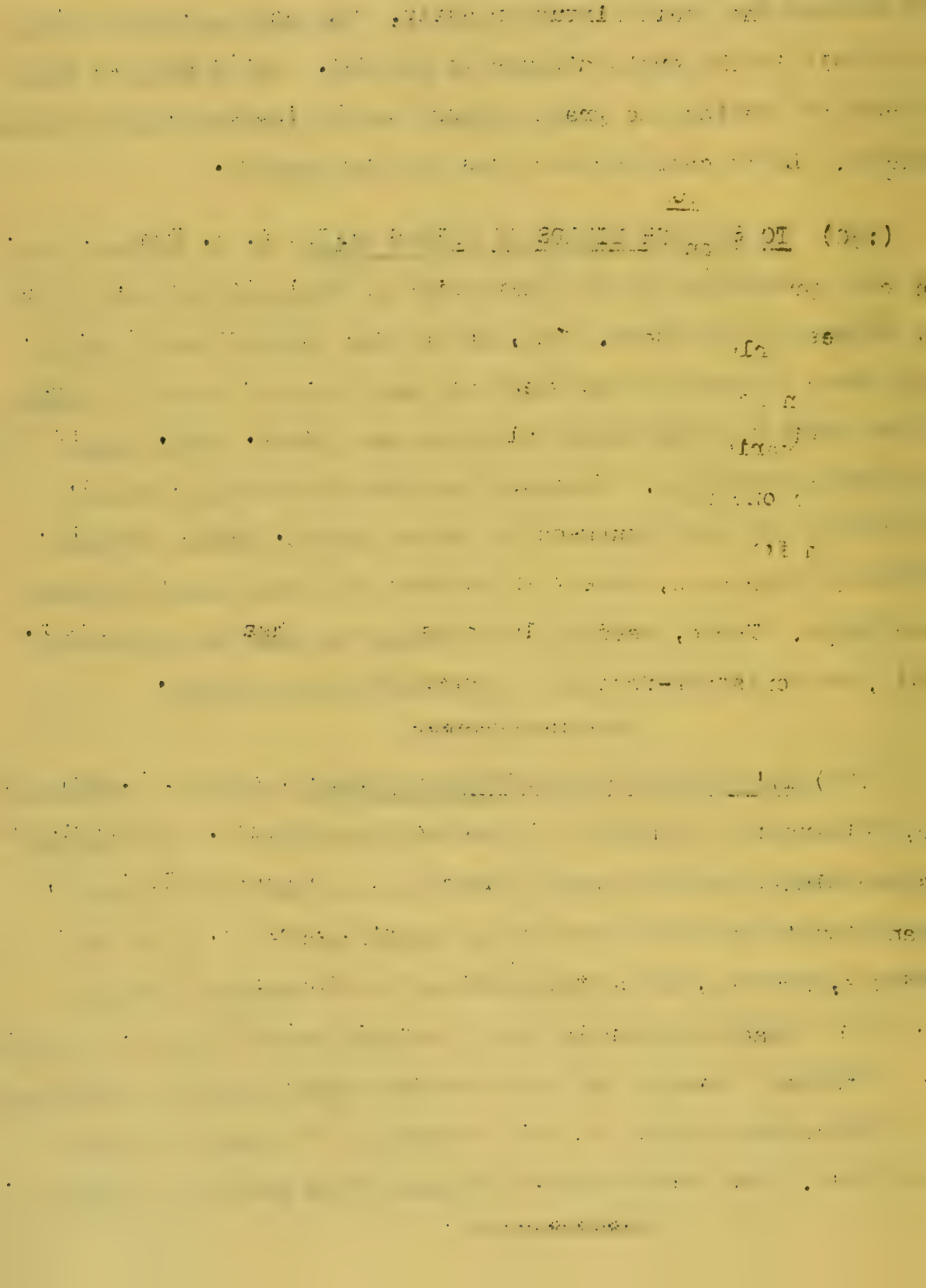
The feeding of a grain mixture to higher producing cows can be continued throughout the pasture season. Holsteins, Brown Swiss and Ayrshires need one pound of grain mixture for each three pounds of milk produced over and above 30 pounds daily. Jerseys and Guernseys need one pound of grain mixture for each two and one-half pounds of milk over 20 pounds daily.



If cows don't care for grain mixture when pastures are luxuriant, take them off pasture one or two hours before feeding time so they will consume the grain mixture readily. One and one-half or two per cent of salt in the grain mixture is helpful. Let's keep in mind that the rate of feeding the grain mixture can be increased when pastures become scanty. Let's care for our cows for our country.

(:30) TO STRETCH YIELDS OF SPRING GRAIN, G. H. Dungan, professor of crop production at the University of Illinois College of Agriculture suggests four steps. One, choose the kind of small grain, remembering that barley exceeds wheat and wheat exceeds oats in pounds of hull-free grain in areas where all three are grown. Two, choose highest yielding varieties. Wisconsin Barbless for barley, Rival, Premier, Illinois one and Sturgeon for spring wheat. Tama, Vicland, Boone, and Marion for oats, except in southern Illinois where Columbia still ranks high. Three, seed early to escape the heat of midsummer. Last of all, sow on stalk-free land preferably with a drill.

(:30) IT'S THE LAST CALL FOR TREE ORDERS, says W. F. Bulkley, forester, University of Illinois College of Agriculture. For southern Illinois the planting season begins March 15, for central Illinois, April 1 and for the northern part of the state, April 7. Those are average dates, however, since the condition of the ground where the trees are to be planted determines when planting should begin. Two men can plant a thousand trees in two six-hour days with average conditions. Order your trees today while the kind or species of tree you want is still available. Order blanks may be obtained from your farm adviser.



EIC

(:15) He was the kind of man who saw his dentist twice a year, had a physical check up every year, drank a pint of milk a day, ate his daily supply of vegetables--one of them raw. He always spoke to the horses when he stepped behind them and stopped at all railroad crossings. But his funeral will be held Thursday. The machine was in gear when he oiled it.

(1:00) 1942 INCOME TAX BLANKS are something many a farmer is puzzling over now and probably wishing he had kept better records of his income and outgo last year.

It's hard to carry a whole year's business in your head without losing track of important items or of many small items that add up to a lot. With the federal tax now reaching into lower brackets and with higher rates, a farmer can't afford to lose track of anything. He needs written records, for memory sometimes falls down on the job.

Agricultural economists remind us that record keeping is always good business. Keeping farm accounts is one of the best methods. But saving old bills, receipts, cancelled checks, and similar records will help out. Farmers now almost need a record of farm income, income from off the farm, and of the many expenses for labor, seed, feed, fertilizer, equipment, taxes, interest and the like that come throughout the year. Written records are just about the only means of keeping this information accurately. And as the war goes on, farmers will need records even more than now.

CLOSING ANNOUNCEMENT: (:10) And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois, College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director.
Acts approved by Congress May 8 and June 30, 1914

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ILLINOIS FARM FLASH
(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

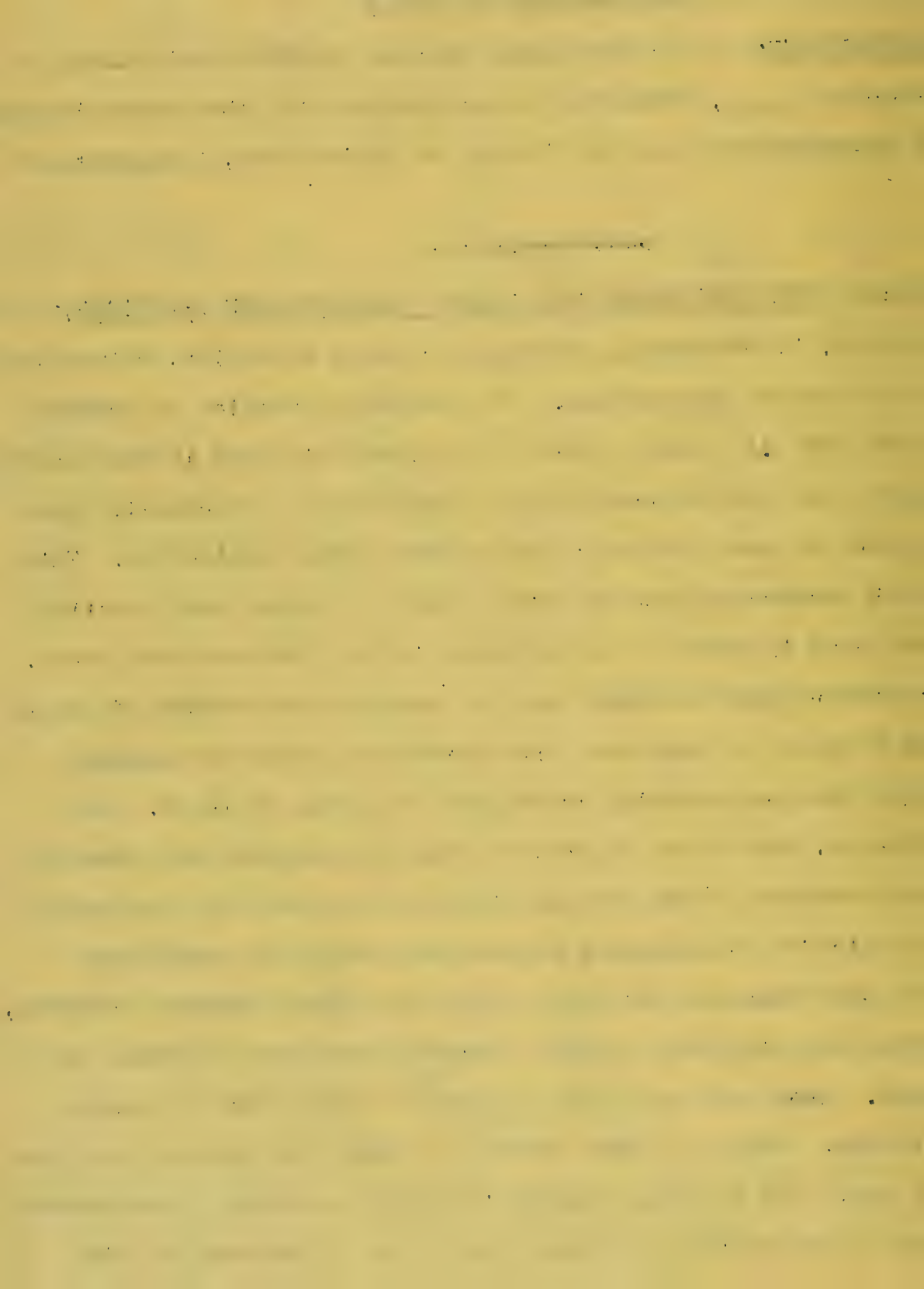
Speaking time: 4:05 minutes

March 4, 1943

(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: (:10) Here again is your ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

(1:00) THE CORN BORER WILL CHANGE ILLINOIS FARM PRACTICES, in the opinion of J. C. Hackleman, professor of crops extension, University of Illinois College of Agriculture. The customary practice of seeding soybeans after corn ~~is~~ planted will be reversed this year in many cases, Hackleman says, and the soybeans will be seeded first, especially where beans are seeded in rows and weeds can be more easily controlled. This will meet with recommendations of entomologists to delay corn planting a week or ten days in order to avoid damage by the European corn borer. Where the customary corn planting date for southern and central Illinois has been May 5 to 10, it will mean the approximate dates for seeding soybeans while the corn planting is delayed until May 15 to 20. In northern Illinois, May 20 and 25 would be the approximate corn planting dates. Recent studies of the corn growing contest, held in cooperation with the Illinois Crop Improvement Association each year, show that corn planted later than the customary dates gave higher yields. However, oats is another crop involved in farm practice changes as a result of the corn borer. Hackleman urges all farmers/^{to} do a good job of plowing under corn stalks. Look in a dark corner for that plow jointer you discarded years ago. Put it back, sharpen the colter, attach a good strong wire and drag it and you'll plow under from 90 to 95 per cent of the stalks. Clean plowing is another step in the direction of corn borer control.

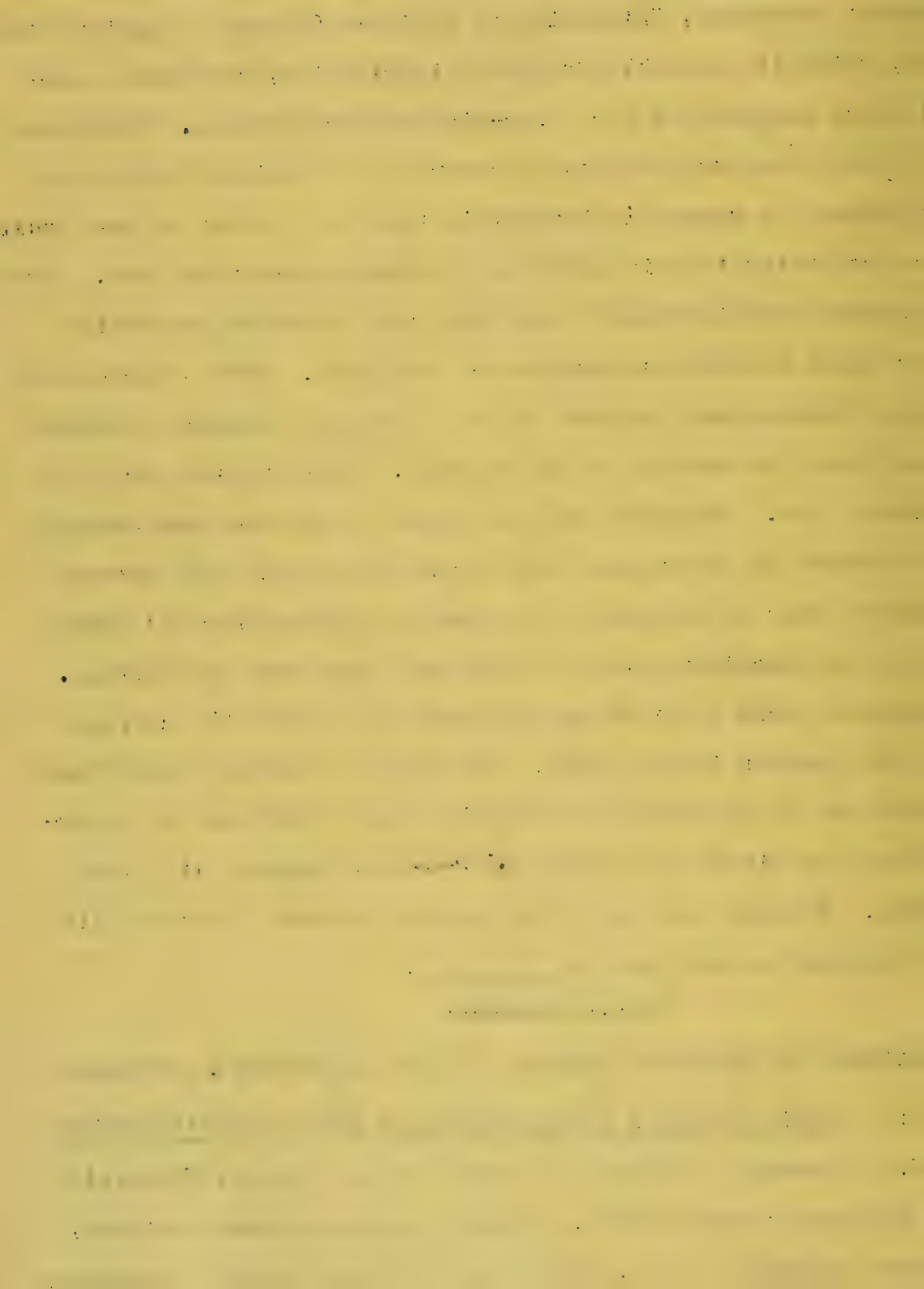


(1:15) RECIPES FOR GOOD FARMING as proved by good farmers have been arranged in a leaflet number AE2004 by M. L. Mosher, professor of farm management extension, University of Illinois College of Agriculture. The leaflet, which is available for free distribution, contains a number of excellent suggestions for a war-winning farm program. Professor Mosher has based these suggestions on records of efficient farmers who have accomplished the seemingly impossible task as a matter of good business. We're referring to this matter of producing more with less. That is, these farmers have increased their crop and livestock production with reduced labor as well as serviceable machinery. Over a three-year period, these farmers have produced 28 per cent more saleable products for each acre than the average in their group. Their yields were nine per cent higher, too. Compared with all farms having the same acreage and the same number of livestock, they accomplished this high production with labor costs 13 per cent less than the average for all farms and with power and machinery costs 26 per cent less than the average. Their net earnings were about \$6 an acre each year above the average earnings of all farmers in the group. The simple practices which these better farmers are in the habit of following year after year in a war-winning program are listed in leaflet AE-2-0-0-4. Remember it's free for the asking. You may call for it by number 2-0-0-4. If you'd like a copy, just drop me a card here at _____.

MAIL ALL REQUESTS TO EXTENSION EDITOR, 109 NEW AGRICULTURE BUILDING)

(1:00) PLAN NOW FOR A BETTER SUPPLY OF NEXT WINTER'S PROTEIN

FEED, says W. B. Nevens, professor of dairy cattle feeding, University of Illinois College of Agriculture. Scarify worn-out grass pastures, scatter on some barnyard manure, apply lime and phosphorus if necessary and then reseed with inoculated sweet clover, alsike, red or mammoth



clover, alfalfa or lespedeza. You'll increase the tonnage and protein content of the crop as well. Even poor meadow stands may be plowed and planted to quick-growing hay crops such as soybeans and cowpeas. You know, it ~~takes~~ only four pounds of good legume hay to furnish as much protein as one pound of soybean or linseed meal, Nevens points out. And, of course, none of us need to be reminded of our shortage of protein feeds we're experiencing right now in the barn-feeding season. But it won't need to happen again if we plant some high protein feed crops this spring. It will take care of some of those protein deficiencies in the rations of dairy cows which might arise next fall and winter. Furthermore, if we make preparations to plant high protein feed crops now, it can be done without reducing our planned acreage for 1943 cash crops.

(:30) WE MAY 'BURN UP THE WORLD' (SO TO SPEAK) WITH VICTORY

GARDENS IN 1943, BUT LET'S NOT BURN DOWN THE HOUSE IN DOING IT. This is a good time for all of us to develop a strong allergy toward burning of vacant lots where we intend to plant our garden this year. It's so easy to strike a match to the dead grass and burn it off clean, but at the same time it's just as easy to burn up a couple of city blocks in doing it. Burn the dead grass in a pile or plow it under. It's safer for you and your neighbors.

CLOSING ANNOUNCEMENT: (:10) That concludes today's ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois, College of Agriculture, and the United States
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Acts approved by Congress May 8 and June 30, 1914

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ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 5:20 minutes

March 8, 1943

(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: (:10) Here again is the ILLINOIS FARM FLASH,
a public service of _____, presented in cooperation with the
United States Department of Agriculture and the College of Agri-
culture, University of Illinois.

(1:00) THE SOUTHERN CORN ROOTWORM may cause considerable
trouble in 1943, according to W. P. Flint, chief entomologist of
the Illinois State Natural History Survey and the Agricultural
Experiment Station. The forecast is based on the wet weather of a
year ago together with the number of beetles which were caught in
light traps between July 10 and August 20, 1942. It has been proved
that when as many as 10,000 beetles are caught each night during
that period---we're almost sure to have trouble from the southern
corn rootworm the next year. And that's exactly what happened in
1942. Now the best way to avoid damage by this insect, Flint says,
is not to get in too much hurry about planting corn---especially on
the best soils. This doesn't mean late planting, but merely that
good land should be plowed early and corn planted in the middle of
the best planting period rather than in the early part of it.
Fortunately, this practice fits in with the best methods of control
that we know for the grape colaspis and helps considerably in avoid-
ing damage by the European corn borer. So let's delay corn planting
on good ground. The crop won't be quite so attractive to the south-
ern corn rootworm beetles when they come back from their winter
vacation in the south.

(1:15) SPEAKING OF PLOWING EARLY FOR SAFETY, you know---

we are having to change our recommendations on some agricultural practices. A few years ago when we had plenty of farm labor, tractors and other farm equipment to get our farm work done in a hurry, we could be "choosy" as to when some job should be started. But not today. Not many years ago, we hesitated to plow clover land very long before corn planting time. That was because we wanted the clover to make a good spring growth. Then we found out that early spring clover growth is mainly translocation of plant food from the roots to the tops. So now we say early spring plowing. Of course, Mother Nature may have something to say about that. But this season, more than ever, we'll want to start plowing early to make up for labor and machinery shortages and help control insects as well. Now maybe you're wondering what effect plowing early for corn has on yields. Well, C. H. Farnham, soils man at the University of Illinois College of Agriculture, tells us over a three-year period in the Danville area, there was no difference noted in two years but the one dry year favored early plowing--fourteen bushels to the acre to be exact. No difference was noted on the other side of the state in Adams county. Farnham says early plowing followed by a little cultivation before planting has been a fine way to control weeds. Then, too, late plowing causes us to run the risk of a wet spring which may delay plowing too long. It looks like plowing early is the thing. At least all arguments seem to be in its favor.

(:45) THE WAR WINNER HOG HOUSE seems to have won a lot of friends in Illinois this year, according to E. T. Robbins, livestock

extension specialist at the University of Illinois College of Agriculture. I have a report here from him that says 406 farmers have written in for the blueprint plans during the past month. 'Remember we mentioned that plan over this station not so long ago. This indicates our spring pig crop is going to be housed pretty well. The war winner hog house was designed by Robbins and the plans arranged by D. G. Carter, agricultural engineer at the University. It's blueprint plan number 428. That's 4-2-8. There's a small charge of ten cents to cover cost of printing. If you'd like one of those blueprint plans, number 428, just drop me a note here at _____, enclose a dime and I'll see that you receive a copy within a week or ten days.

(MAIL REQUESTS TO EXTENSION EDITOR, 109 NEW AGR.)

(1:00) GET RESULTS NOW WITH ROCK PHOSPHATE, is the suggestion which comes to us today from C. M. Linsley, agronomist, University of Illinois College of Agriculture. He points out that phosphorus, as well as other fertility materials, has been sold from Illinois farms through crops and livestock during the past 75 years and on most farms no replacements of phosphorus have been made. Some of these soils have now become so low in phosphorus as to reduce corn yields as well as yields of small grains, clover and alfalfa. Rock phosphate can be applied at any time and any place in the rotation. The important thing is to get it on the land that needs it. Where rock phosphate is to be used, Linsley says that extra heavy applications of lime should not be applied. Apply limestone as called for by test. The demand for rock phosphate will probably increase next year and it may be difficult to get prompt

deliveries. Where farmers have storage space, it would probably be wise to order phosphate early and take deliveries during the slack season. If no fields are ready for phosphating, store the phosphate until it can be spread.

(1:00) A REASONABLE RENTAL RATE FOR BORROWED MACHINERY

might help borrowers to appreciate the importance of careful use and compensate owners for maintenance of the machines, in the opinion of R. C. Hay, University of Illinois College of Agriculture. To encourage the sharing of machinery on a rental basis, a rental schedule for farm machines has been prepared by a committee of agricultural engineers. It suggests cost rates for each hour the machine is used. This rental schedule can also be used as a basis for custom rates by simply adding wages of operators, fuel, lubricants and other operating costs. Forty-two machines in all are listed, showing the basic rental rate for the first five hours as well as the rates after the first five hours. Now if you're planning to borrow or loan any piece of machinery from an endgate seeder to a sulky rake, we'd suggest you get a copy of the rental schedule for farm machines. It's free for the asking. Just drop me a card here at _____ and I'll see/you receive one within a week or ten days. You may call for it by name or number. Ask for rental schedule for farm machines, number A. Eng 3-7-1.

CLOSING ANNOUNCEMENT: (:10) And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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University of Illinois, College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director.
Acts approved by Congress May 8 and June 30, 1914



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TWENTIETH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 3½ minutes

March 11, 1943
OFFICE OF THE
APR 12 1943
UNIVERSITY OF ILLINOIS

(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: (:10) Here is the ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

(:30) Here's an item on insecticides from H. B. Petty, extension entomologist of the Illinois State Natural History Survey. You know, insects aren't going to wait for us to get insecticides this summer. They'll be there in full force. So Petty suggests that we don't get there "latest with leastest." Supplies of most insecticides are ample. Some of us may even be able to buy rotenone dust. About ten pounds of it will be enough for the home garden of average size. If you can't buy rotenone, try lead arsenate. Three or four pounds mixed with nine pounds of lime will make a good garden dust for chewing insects such as cabbage worms. So let's buy our insecticides along with our garden seeds.

(:30) It looks as if Old Dobbin has her nose in the news this morning. We haven't heard much about her family since the tractor came along a few years ago. Anyway, here's a note from C. W. Crawford, assistant professor of horse husbandry, University of Illinois College of Agriculture, about horses and mules. Values are up 23 per cent in the case of horses and 20 per cent in the case of mules. A good export trade is expected in some quarters after the war. Work horses in Great Britain are bringing two or three times as much as here. It is probable that most of the European countries will continue to farm with horses. On the other side of the ledger is the question of financing and the scarcity of good horses here.

(1:30) OAT SEEDING is just around the proverbial corner, you know. And while it has been a good old American custom since the days of George Washington (he was one of the first who tried 'em), let's check up on points to remember when seeding oats. This is one year we want to make a bushel and a quarter or a bushel and a half of oats grow where one bushel grew before if we can. Anyway, G. H. Dungan, professor of crop production, University of Illinois College of Agriculture, has set up the points in one, two, three, four order. And here they are.

First, choose an adapted high-yielding variety. A new circular on spring oats, number 5-4-9, has some good recommendations on that. Professor Dungan wrote it, too, along with Dr. Burlison, head of the agronomy department. Well, after choosing an adapted high-yielding variety, we'll want to seed moderately early, preferably with a drill. Borrow your neighbor's if you don't have one, and loan him your manure spreader in return.

Next, adjust rate of seeding to the method of seeding. It works like this. If you seed with a drill, use eight pecks to the acre, two bushels in other words. If you're broadcasting, seed 10 pecks, two and one-half bushels to the acre. If you're seeding a legume along with the oats, cut down on the amount of oats. Use six pecks if you drill and eight if you broadcast. If you forget those figures, you'll find them in circular 5-4-9.

Last of all, harvest the crop when it's ripe with a binder and thresh with a regular small-grain separator. You can use a combine, but take care the grain doesn't heat and mold in the bin. Now this circular I mentioned on spring oats has a lot of other good information in it about varieties. If you'd like a free copy drop me a card

here at the station and I'll see that you receive one. Ask for the circular on spring oats, it's just four pages, or call for it by number---5-4-9.

(:40) CLEAN UP, GREASE UP, HANG UP the shovel and the hoe, the spade and rake and all the rest of the garden implements you'll be using before long. You'll do a better job with your victory gardening with tools properly cared for. Greasing the hoe blade or the spade will help keep them from rusting after they're cleaned. And hanging them up will keep you and your children from stepping on them and ending up in a hospital instead of a victory garden. Stepping on the hoe blade or rake teeth can give you a wallop (by the handle flying back) comparable to a good upper cut by Joe Louis. And we can't be counted out in ten seconds this year. So hang up the garden tools, folks, after getting them in shape. It's a lot safer.

CLOSING ANNOUNCEMENT: (:10) And so ends another Illinois Farm Flash, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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TWENTY-FIRST
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 5 minutes

March 15, 1943

(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: (:10) Here is today's ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

(1:00) Here's an item on varieties and supplies of soybean seed which comes to us from J. C. Hackleman, professor of crops extension, University of Illinois College of Agriculture. While supplies appear to be ample, farmers who have soybean seed are urged to make germination tests promptly and list surplus seed with their farm adviser.

As for varieties, Illini and Dunfield will be satisfactory as far north as LaSalle, Hackleman says. Beyond the Rock Island-Joliet line, varieties to be considered are Richland and Mukden. Richland is particularly good on fertile soils, while Mukden, not quite as early as Richland, will be found satisfactory on average land. Farmers in northern Illinois should be cautioned against a variety as late as the Chief unless they have soil that is likely to hasten maturity, that is, sandy types. Chief is still an excellent bean in southern, south central and central Illinois and will be in great demand. There'll also be a strong demand for Macoupin in southern Illinois. This variety has proved satisfactory in that section as well as Missouri, Kentucky, Tennessee and parts of Arkansas and Mississippi. Mt. Carmel and Scioto (sy-'o-'toe) are also good for south central and southern Illinois.

(1:00) Of course, the livestock hasn't as yet been placed on a point system for rationing feed, but it almost adds up to that when we consider priorities for protein in animal production. Incidentally, that's the name of a little blue leaflet just compiled by W. E. Carroll, head of the animal husbandry department in cooperation with other staff members of the University of Illinois College of Agriculture. The leaflet points out how each pound of supplement should be placed where it will be most effective, taking into consideration poultry, dairy cattle, pigs, beef cattle and sheep. Nothing in the picture at present justifies the belief that the protein situation will be greatly relieved by next year. However, considerable improvement can be brought about on individual farms if thought, planning and effort are applied. This leaflet entitled, "Priorities for Protein in Animal Production," will help you in your planning. It contains a number of rations which will help make the best use of the protein you have on hand. If you'd like a free copy, just drop me a card here at Station _____ and I'll see you receive one. You may call for it by number, AH 1383. That's AH 1-3-8-3

(1:10) Spare the fertilizer and spoil the fertility doesn't necessarily apply to victory gardens. We're saying that simply because a number of us may decide we just can't grow a garden without several good handfuls of fertilizer to the row. Well, B. L. Weaver, associate in vegetable gardening extension, University of Illinois College of Agriculture, has given us some precautions on using fertilizer.

In the first place, there's only one commercial fertilizer available to victory gardeners. It's called "Victory Garden" fertilizer analyzing 3-8-7. That means it contains three per cent



nitrogen, eight per cent of phosphoric acid and seven per cent potash. And even at times it may be difficult to obtain.

In the second place, if there was a good crop of weeds a year ago on the lot where you're planting this year's garden, you can forget about fertilizer this spring. If the plot had a good growth of Kentucky bluegrass, you can still forget about fertilizer. And if you're planning to use a vacant parking lot, where even weeds will not grow, forget about the garden. In other words, try to rent another lot.

There'll be cases where commercial fertilizer will do your garden some good. In these instances, apply it before your garden is even plowed. Something like three or four pounds will be enough for a kitchen garden. Circular 522, the Illinois Garden Guide, will give you full information on your fertilizer needs. Write for your free copy today.

(1:00) Sell in haste and repent at leisure is a new twist to an old adage that growers of black walnut can well keep in mind when marketing their logs. You know, more black walnut is needed for war uses, according to J. E. Davis, extension forester of the State Natural History Survey and the University of Illinois College of Agriculture. But he cautions owners of black walnut to check the markets before making any sales. Prices in Illinois range from \$40 a thousand board feet to more than \$100 depending on the grade. Keep in mind there are no ceilings and the government employs no buyers for walnut logs. Of course, selling on a written contract basis is almost a "must" when marketing any timber. Remember to include a clause for settlement before any logs are removed from your property.

The best grade walnut trees for market are those 18 inches or more in diameter at shoulder height. The smaller trees should be left for use later on. If you're further interested in market outlets for your walnut logs, get in touch with your farm adviser or write your extension forester.

(:30) Let's doff our caps to the Ardmore 4-H Club girls of DuPage county for their splendid contributions in the victory program. They've donated twice to the Chicago U.S.O. and knitted for Red Cross. They made a list of boys in service (represented by homes of club members, nine in all) and sent gifts of candy, cookies, razor blades and shaving cream. They made a doll bassinet from a large market basket and furnished it with bedding and pillows. This was presented to the Lincoln Kindergarten in Elmhurst. They made scrapbooks for the children's ward in the Elmhurst hospital and the Lombard Sanitarium. They've collected stockings, tin cans and kitchen fats. The leader is Mrs. Robert Adams.

CLOSING ANNOUNCEMENT: (:10) And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois, College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director.
Acts approved by Congress May 8 and June 30, 1914

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TWENTY-SECOND

ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 6½ minutes

March 18, 1943

(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: Here again is the ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

(1:00) If I hadn't seen it I wouldn't have believed it. I'm referring to a five-page leaflet called wartime dairy spreads for home use. I'm not going to feel so badly when butter rationing comes along now, because I've just found out in this leaflet how to stretch a pound of butter six different ways. Imagine! Thanks to P. H. Tracy, head of dairy manufacturers, University of Illinois College of Agriculture and one of his research assistants Harry Pyenson, these leaflets are available for free distribution as long as they last. Six recipes on butter spreads, four more on whipped butter spreads, others on butter cheese spreads and cheese spreads without butter. Now if you're interested in making your butter supply serve more people, I'd suggest you write for this free leaflet today. You may call for it by number D-475. These butter extenders, pound for pound, aren't as nutritious as butter itself, but using them may help us solve the food problems to some extent. Just drop me a card here at _____ and ask for your free copy of this leaflet on stretching your butter supply---number D-475. I'll see that you receive your copy right away. It's number D-475.

Eggs are now one of the foods selling under permanent price ceilings. This means that during the remainder of March, and

through April and May you cannot sell eggs to the homemaker at a price higher than the retail ceiling, or to the egg buyer or grocer above the wholesale ceiling.

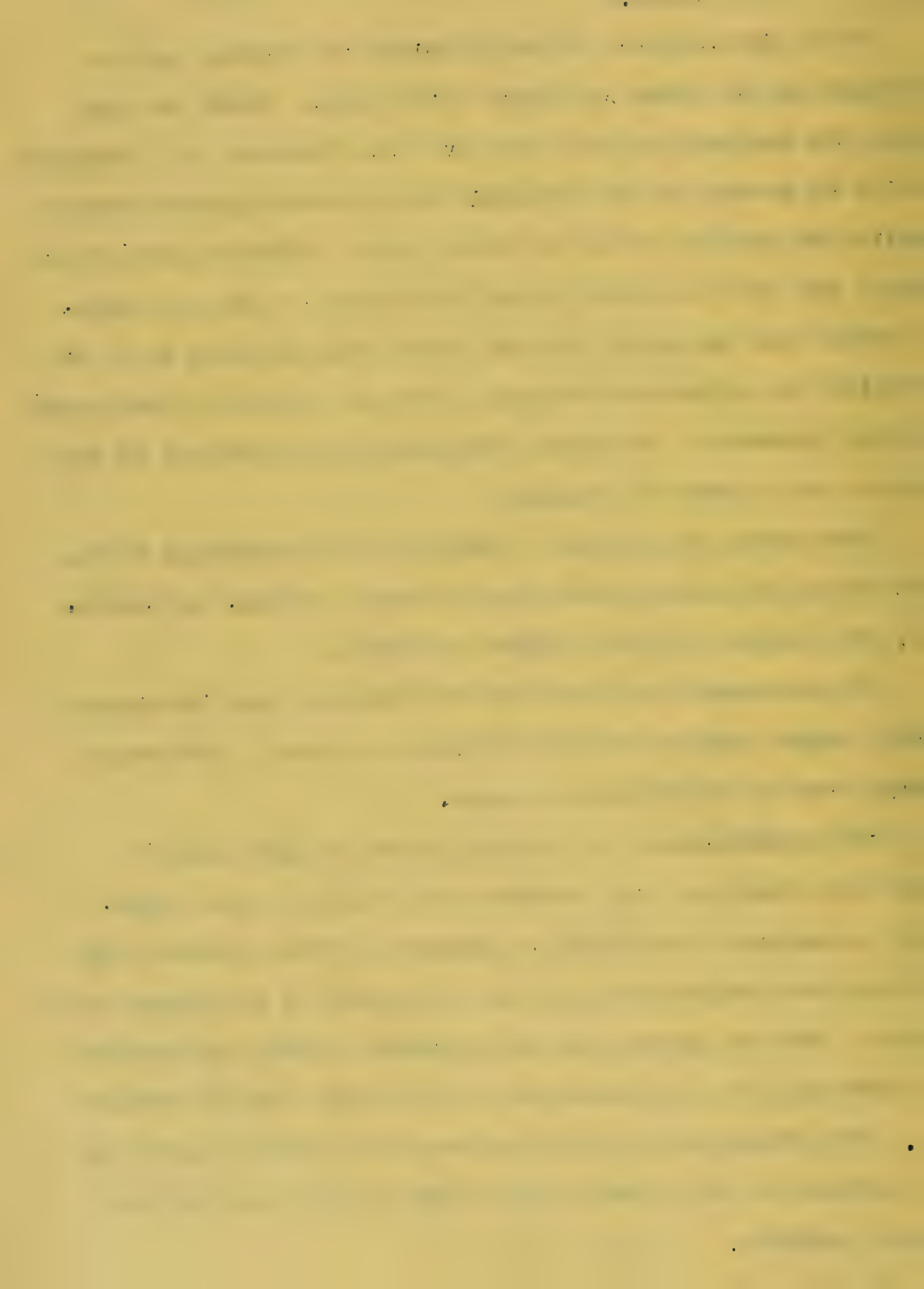
Food distribution officials point out ceiling prices vary according to the grade and size of the eggs. Grade AA eggs are allowed the maximum ceiling price by OPA. However, all Grade AA eggs have to be graded by the licensed Federal-State graders before they receive the ceiling price for this grade. Grades A and B follow in order and can be graded by the poultryman or the egg buyer. When you grade your own eggs, you may class them in Grade A, B, or C, and receive the prices accordingly. But, if you sell "just eggs" retail to the homemaker, the Grade C ceiling for large eggs is the top price you are allowed to charge.

Each grade of eggs has a ceiling price according to the size. The sizes are jumbo, extra large, large, medium, and small. Naturally, the larger eggs have higher ceilings.

The wholesale ceiling price for average eggs throughout the country ranges from about 39 to 43 cents a dozen. The retail price varies from 49 to 54 cents a dozen.

The establishment of ceiling prices on eggs doesn't necessarily mean that you will receive that price for your eggs. That's only a maximum price which is allowed by OPA. However, the USDA price support program assures the poultryman of a minimum price for his eggs. For the spring and early summer months, the support or floor price will be a U. S. average of 30 cents for all marketable eggs. The officials explain this price will vary slightly in different sections of the country depending largely upon distance from terminal markets.

In proportion to the number of hogs, chickens, and other stock ordinarily fed animal proteins, supplies of these feeds are only about two-thirds as much as we had two years ago.



That means we have to make up for the lack of tankage, meat scrap, and fish meal with vegetable oil meals, and other feeds.

Since hogs ordinarily take much of the animal protein feeds, hog feeders especially need to make such feeds go as far as possible.

Feed men say that a start has been made toward spreading available supplies of animal proteins through an agreement between federal and state livestock specialists and the feed industry to cut down the amount of animal proteins in mixed feeds put out by commercial feed companies. The general aim is to save as much animal proteins as possible for the sows and young pigs, and to taper off amounts fed to fattening hogs. Livestock specialists say that the new mixtures won't produce quite as rapid gains--but they still have enough animal protein for good feeding.

Commercial mixtures account for only about 15 per cent of the feed for hogs. The big opportunity for saving animal protein feeds for use by hogs is with materials bought as straight proteins. The new recommendations say that protein supplements for growing and fattening hogs should not contain more than 3 per cent of actual animal protein which is equivalent to 6 pounds of a 50% tankage per 100 pounds of supplement.

Livestock growers, can also take steps on their own to make animal proteins go further. Where they have straight tankage, meat scrap, or some other animal protein, they can mix it with such feeds as soybean, alfalfa, and linseed meals---and middlings. If they have a clean tight floor, they can pour out so many bags of animal protein and vegetable proteins and mix them right on the floor. They can also make protein feeds go further by feeding more barley, oats, and wheat - and by providing good legume pasture.

And this final word to hog growers. Save the fish meals for poultry. The poultry need the fish meals more than hogs do.

A final note on meat sharing.

Our Allies, our soldiers, and our people at home need meat to furnish energy for their added wartime jobs. Because of these increased demands on meat, we need to take care that none of our meat supply is wasted. Lately, illegal dealers have been draining the meat from these vital war needs. These black market operators ignore the government regulations on the number of animals for slaughter, and often charge prices above the permitted OPA ceiling. The meat leggers waste valuable materials such as the hides, lard, and other fats. Often they throw away some of the variety meats -- heart, liver, tongue -- in their rush to sell the choicest cuts at skyrocket prices.

In order to curb these unfair methods of distribution, Secretary of Agriculture Claude R. Wickard has announced that everyone who slaughters livestock, with the intention of selling the meat, must get a permit. The only exception is the man who slaughters his animals for his own personal use.

Another provision of the order requires that after March 31 all farmers slaughtering meat to deliver must have an individual permit number and stamp it conspicuously on each wholesale cut of meat. You can get your number from the county USDA war board. Stamping meat with this permit number is designed to hinder the sale of illegal meat.

For further protection, all farmers must keep a record of all their buying and selling of livestock.

Through these protective measures, it is hoped that illegal buying and selling of meat can be stopped and that the country's meat supply can be distributed so the meat will go around.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois, College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director.
Acts approved by Congress May 8 and June 30, 1914

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TWENTY-THIRD
ILLINOIS FARM FLASH

(From the Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

APR 12 1945

Speaking time: 5 minutes

March 22, 1945 UNIVERSITY OF ILLINOIS

(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: (:10) Here is today's ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

We'll have to be very saving in our use of rotenone to control insects this year. The reason is that imports are small.

We used to get about 60 per cent of our rotenone from the Far East. We now have to depend largely on imports from South American countries. In addition to the wild crop, South American farmers are going ahead growing more rotenone under an agreement with our government. But it takes two years to make a crop. Meanwhile, we can't get as much rotenone as our farmers would like to have.

The rotenone we can get is reserved mainly for our more important food crops and insect pests for which it is most effective.

Officials explain that rotenone will be limited to these specific uses:

Pea growers can get rotenone to control pea weevils and aphids; rotenone is the only material found so far to control the pea weevil which is especially bad in the Pacific Northwest....Bean growers can get rotenone to control the Mexican bean beetle which does so much damage in the East....Truck growers can get rotenone to control caterpillars and aphids on the cole crops....And farmers who grow sweet corn can get rotenone to control the European corn borer.... Besides those food crops, rotenone can be used to control the cattle grub or so-called ox warble, and also the shortnosed cattle louse.

Even for those uses, we'll need to be saving with rotenone to make it go as far as possible.

Here's an item on a new plan for more eggs.

So far, poultrymen have met their wartime egg goals. But supplies of equipment, housing, feed and labor are limited. Looking ahead to the time when we may want still more eggs, a nation-wide program is being worked on to get more eggs per hen, with little or no extra feed.

Poultry specialists estimate that poultrymen can get possibly 10 per cent more eggs from their flocks through full use of better breeding stock. They urge all poultrymen who supply eggs to commercial hatcheries to buy cockerels from lines with high egg-production records. Since these commercial hatcheries produce about 85 per cent of all baby chicks in the country, the use of better cockerels with these flocks will mean more eggs in the egg basket from most of the nation's laying flocks.

Up to now, not more than one-fourth of the flocks that supply eggs to commercial hatcheries have been headed by males of the better egg-laying lines. But this year breeders will have enough cockerel chicks of the U. S. Certified or better breeding to head all flocks that produce eggs for commercial hatcheries. These cockerels are from strains in which the hens average about 171 eggs a year, as against the national average of 113 eggs. It is estimated that the use of these cockerels on breeding flocks next fall will boost 1944-45 egg production about 10 per cent with prospects of a still higher percentage later as flocks are further improved.

The 500,000 poultrymen throughout the nation who supply hatching eggs to commercial hatcheries are urged to buy these high-quality cockerels as day-old chicks this spring.

Now a note on milk products.

Milk production in the first half of this year probably will total more than during the first half of last year. Agricultural economists say, although production per cow so far this year has run somewhat below that of a year earlier, the 2 per cent more cows on farms has been more than enough to offset this decline.

Butter production is reported larger than a year ago, but production of cheese and evaporated milk continues smaller. With 30 per cent of current butter production set aside for direct war requirements, supplies for civilian use are expected to prove smaller in March than in January, although civilian consumption may increase slightly in later months as butter production increases seasonally.

The recent order setting aside 50 per cent of the production of Cheddar cheese for war uses probably will have little effect upon civilian use of cheese until present large commercial stocks of cheese are reduced.

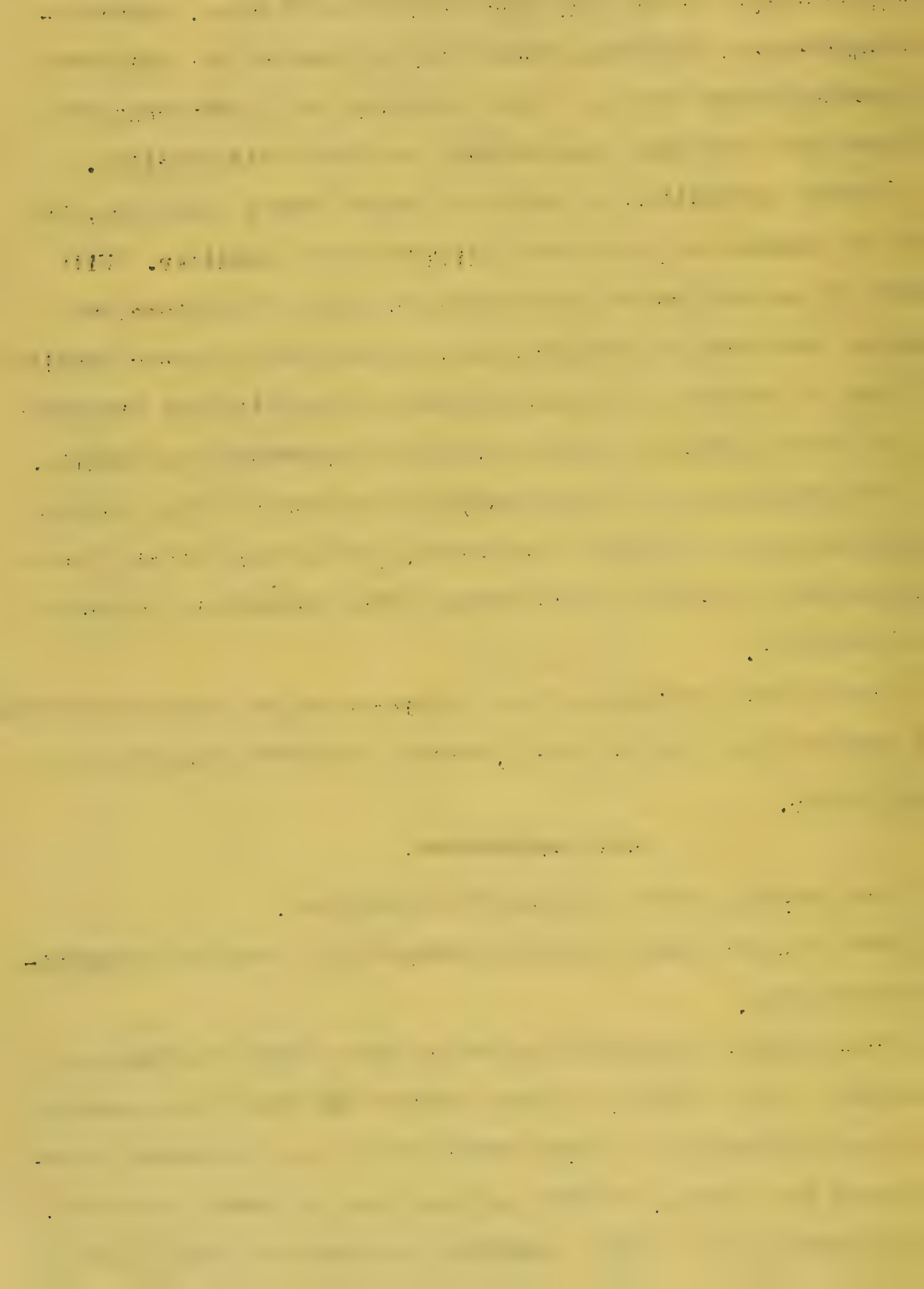
Use of milk for manufacture of ice cream has been restricted to 65 per cent of last year's level, under a permanent ice cream limitation order.

Now here's a brief outlook for livestock.

Here are the farm livestock prospects as received by agricultural economists.

With nearly 3 million more cattle and calves on farms now than a year ago, total number of these animals marketed for slaughter in 1943 can and probably will prove much larger than the record number slaughtered last year. Weights per head may be lower, however.

Economists also expect slaughter supplies of hogs in the marketing year ending next September to top hog supplies in the



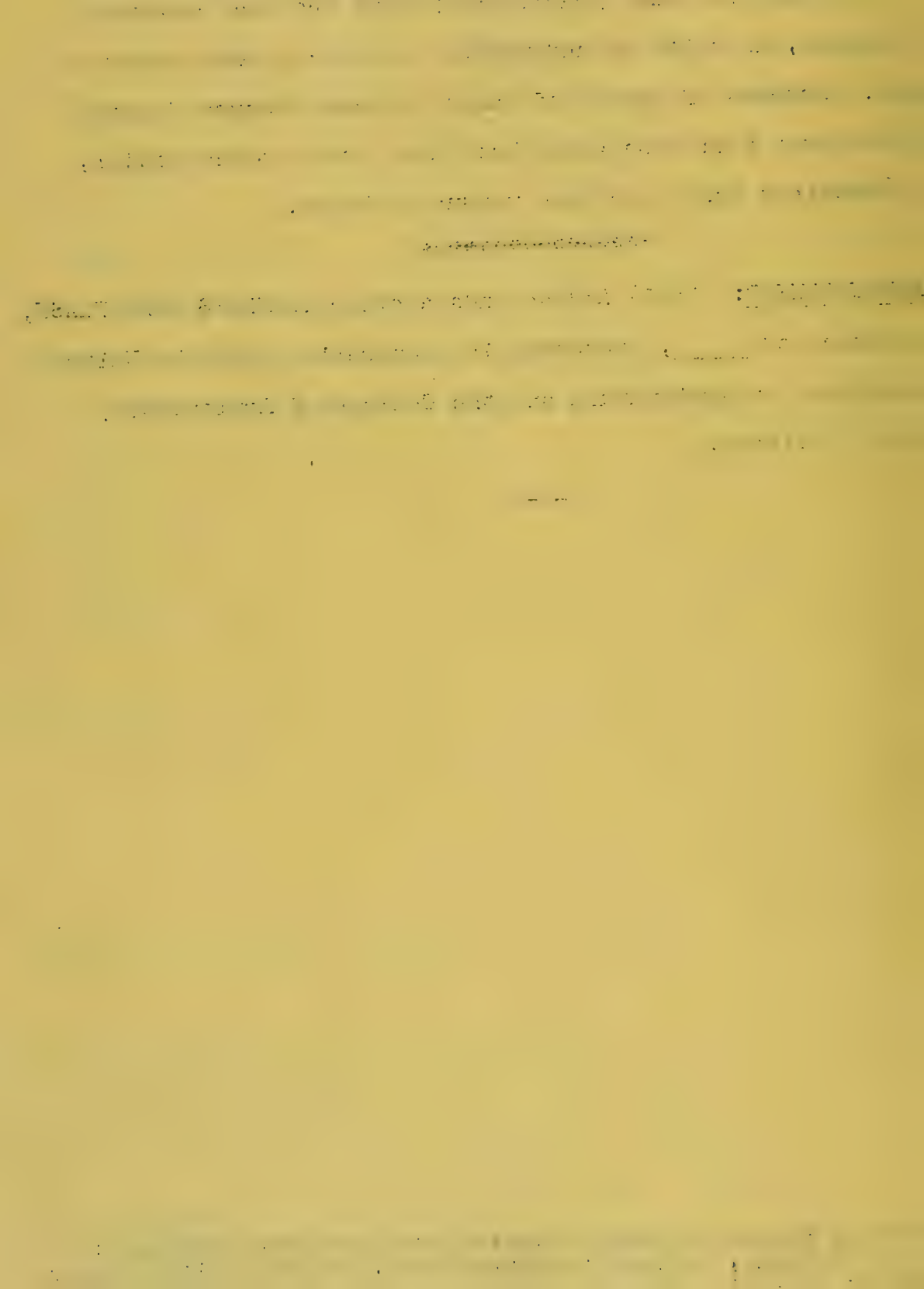
previous marketing year. The number of hogs on farms, as of January 1, was more than 13 million larger than a year earlier.

Prospects for this year's early lamb crop are reported mostly favorable, in spite of unfavorable weather in some parts of the country. Numbers of sheep and lambs on farms January 1 were only a little over a million and a half less than a year earlier, although marketings last year were unusually heavy.

CLOSING ANNOUNCEMENT: (:10) And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois, College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director.
Acts approved by Congress May 8 and June 30, 1914



630.7
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TWENTY-FOURTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 7 $\frac{1}{2}$ minutes

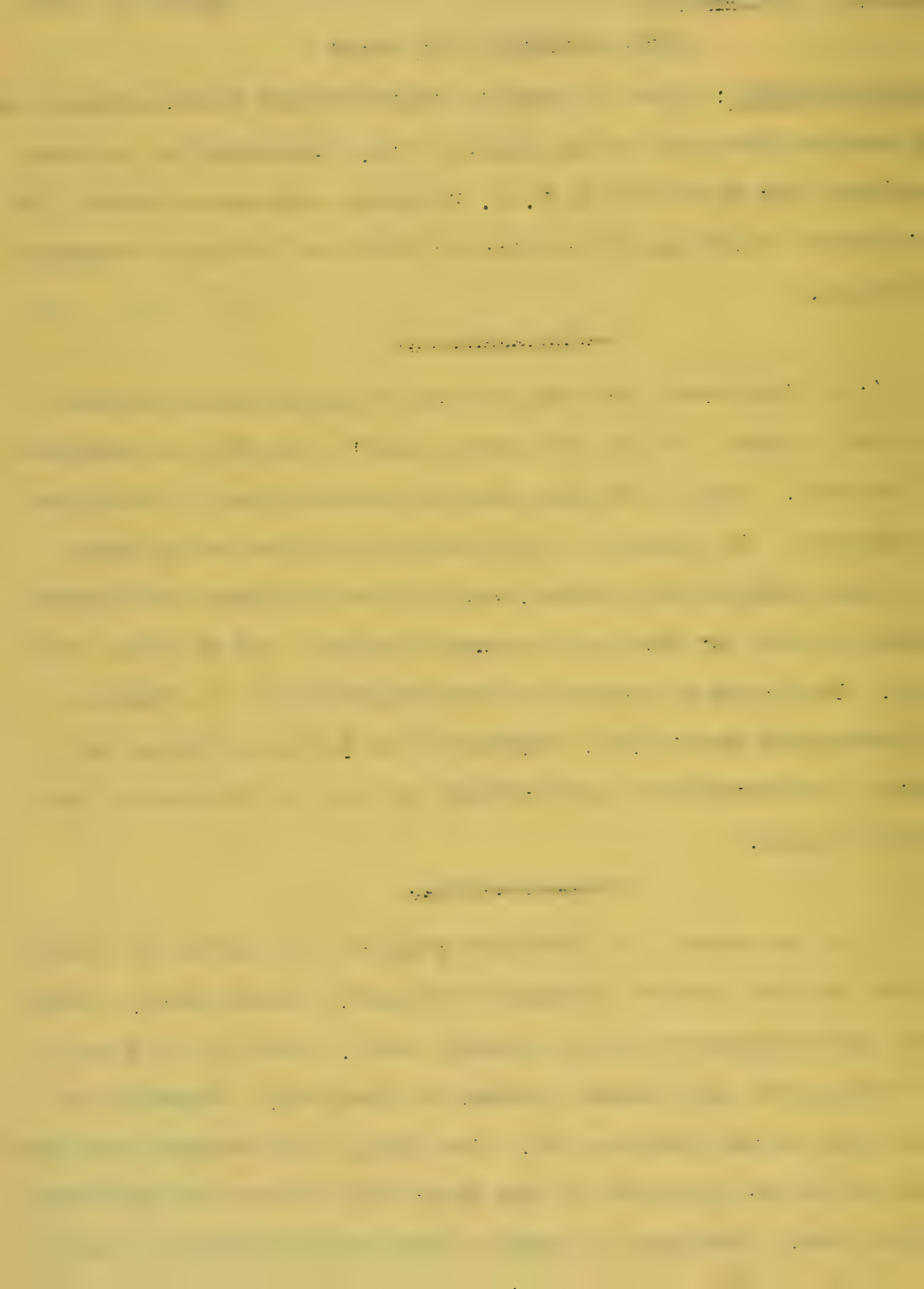
March 25, 1943

(FOR BROADCAST USE ONLY)

OPENING ANNOUNCEMENT: Here is today's ILLINOIS FARM FLASH arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture at Urbana.

(:30) Pigs need the best pasture on ground where no hogs have been for a year. If the old pasture won't qualify, an emergency crop may be sown. One of the most popular combinations is known as the Haas mixture. It consists of two bushels of oats to the acre, with two pounds each of red clover, sweet clover, alsike and timothy. This mixture is sown at the usual oat-seeding time and is ready for use in May. This kind of pasture is recommended by E. T. Robbins, livestock extension specialist, University of Illinois College of Agriculture, for convenience and economy, as well as for health and rapid gains of pigs.

(:30) Be careful of your feed supply----no matter if you're feeding five or five hundred chickens this year. Avoid waste. Don't store your chick starter in a hot brooder house. Keep it in a cool, dry room to conserve the vitamin potency of the feed. Remember to keep fresh feed in the feeders, too. You know, feed covered with dust from litter dulls the appetite of the birds and reduces the effectiveness of good feed. Now when it comes to this matter of water, let's keep in mind that we'll need to provide two pounds of water for every pound of feed. That's clean, fresh water, too.



(:30) Here's an item I picked up the other day that will give us all something to think about. "The well-being of a people is like a tree; agriculture is its root, manufacture and commerce are its branches and life; if the root is injured, the leaves fall, the tree dies." Those are kind words for agriculture in times such as these. But listen to this. They were the exact words spoken by Shonung, Chinese Emperor----an inventor of agricultural implements, by the way, too----who lived 2800 B. C. Well, I'm wondering if we still can't say the same thing about agriculture today.

(:30) You folks who neglected to band your shade trees for control of cankerworms will just have to wait and spray. Yes, sir. It's too late to band now. And according to W. P. Flint, chief entomologist of the Illinois State Natural History Survey, we're going to have a lot of cankerworms this year, too. So keep a close watch on your shade trees, especially elms, and apply the spray when the leaves are about one-fourth inch across. You may need to ask for some help from commercial tree sprayers, because you won't be equipped to spray your tall shade trees. However, you can keep an eye on your trees to see when the spray is needed.

(1:15) Here is a report on that highly infectious malady of cattle now known as brucellosis.

We used to call it Bang's -- But whatever you call it, it lowers milk production and cuts down the calf crop. So it's important to know that vaccination of calves against brucellosis really works.

Here's a report on a six-year test in which more than 21,000 calves were vaccinated when about six months old and then were

allowed to mingle under field conditions in herds where at least 15 per cent of the cattle were infected with brucellosis. When the vaccinated calves developed into breeding cattle, they were tested for brucellosis and only about 1 per cent showed any signs of infection. Nearly 97 per cent of the vaccinated animals calved normally. Early in the investigation the vaccination proved effective enough to include calfhood vaccination in the official plan for control of brucellosis.

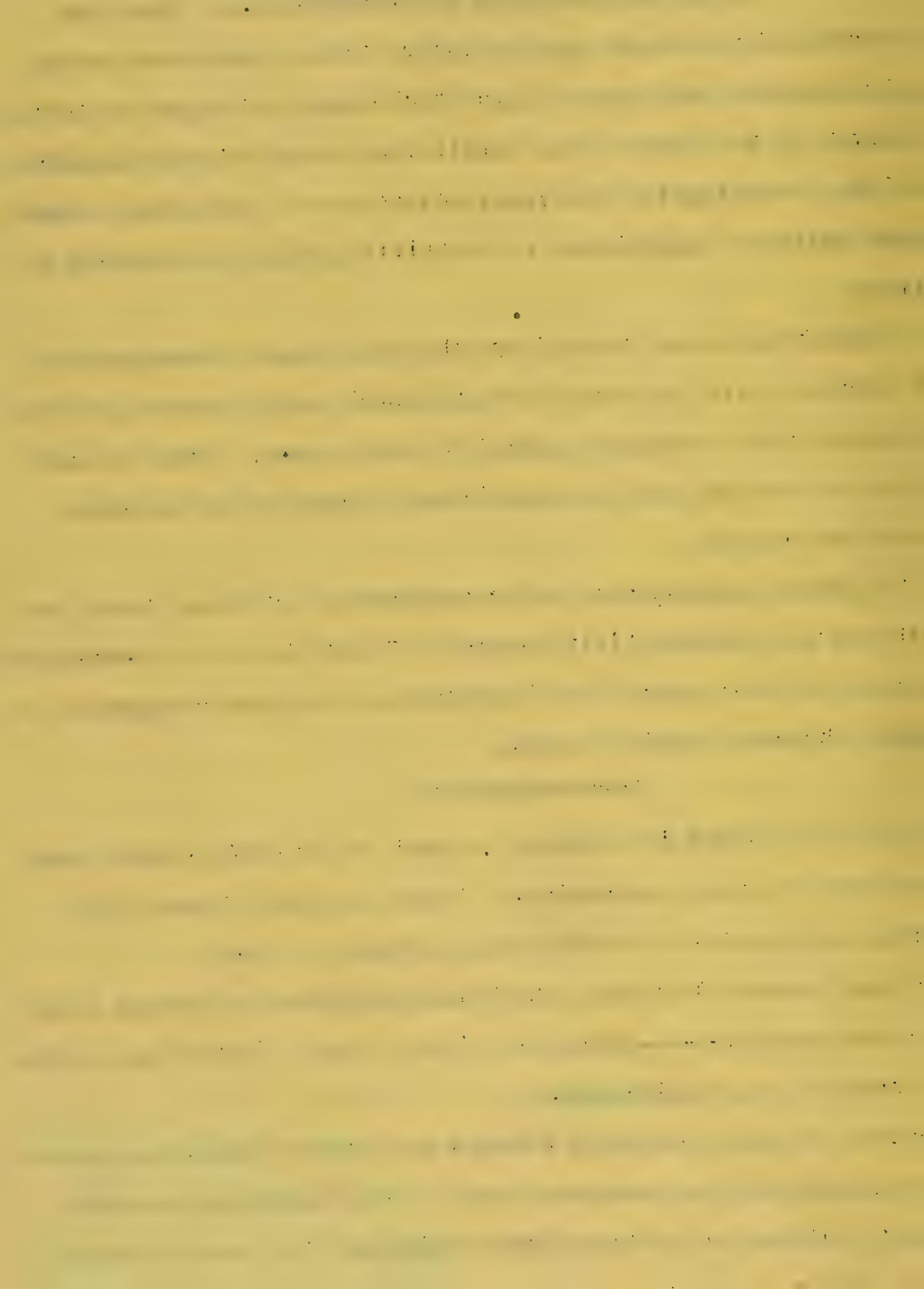
Under that plan, during the past two years, veterinarians working together with the state officials and dairy farmers and beef cattle raisers have vaccinated about 290,000 calves. This is just a beginning on the big job to control brucellosis in cattle herds throughout the country.

Calfhood vaccination is not recommended in clean herds, but in herds that are infected it's valuable in the control of brucellosis. We must keep in mind there is no substitution for good management in the control of brucellosis in cattle.

(1:45) In 1943 we're going to need to get every bit of work we can get out of every farm machine. That is going to mean that many of the machines will be used on more than one farm.

Some farmers will work with their neighbors in buying a new piece of farm machinery----others will find a way to share the equipment now owned in the neighborhood.

Both of these groups of farmers can benefit from the experiences of farmers who have borrowed money to buy machinery and then have worked together in operating that machinery for several years. Here is one point these farmers have found important in carrying on their co-ops.



Put all agreements in writing. Then no one will forget what he agreed to. Almost everyone wants to live up to his agreements----the difficulty is that we forget what we agreed to if we don't put it down in writing.

Sometimes we don't even come to an agreement. For example, here's what often happens with a group of men who have lived in the same neighborhood for years and have always got along well. Let's say they buy a spray outfit. They agree how they'll pay for it and how much each will use it. But they don't agree about the actual operation of the outfit. That leads to trouble that may wreck the venture. One of the cooperators insists on having his orchard sprayed first. There are several cooperators who want the same thing. When they got together to talk over the difficulty one of the older men pretty well expresses the sentiment of the whole group when he says, "This isn't the time to quarrel. Let's figure out a plan of rotation of the spray rig and put it down in writing and then we'll all know what to plan on." So they do and while they are at it, they come to an agreement about a number of other points and include them in the written agreement.

The rental schedule for farm machines will help you to remember some of the important points to include in the agreement. This request is free for the asking. Just drop me a card here at _____ and ask for rental schedule for farm machines, number 371. That's 3-7-1.

(1:15) Here is the way to make the most of the commercial fertilizer you use in your victory garden.

While broadcasting fertilizer is the easiest way to use it, garden specialists say it is also the most wasteful way.

To get the most efficient use of garden fertilizer, use a hoe to scoop out a wide furrow about two inches deep and two inches from the line where you sow seed or set plants. Then apply the fertilizer in this furrow, making a band three to four inches wide. You'll need about one pound to 30 feet of row.

Mix the fertilizer with the soil and cover about two inches deep. You can do this partly by opening up the planting row if you are ready to sow seed or set plants. However, take care not to let the fertilizer touch seed or plant roots.

Fertilizer is more difficult to get because chemicals have gone to war, but a special brand was authorized this year solely to help victory gardeners produce needed food. The use of it is restricted to food growing.

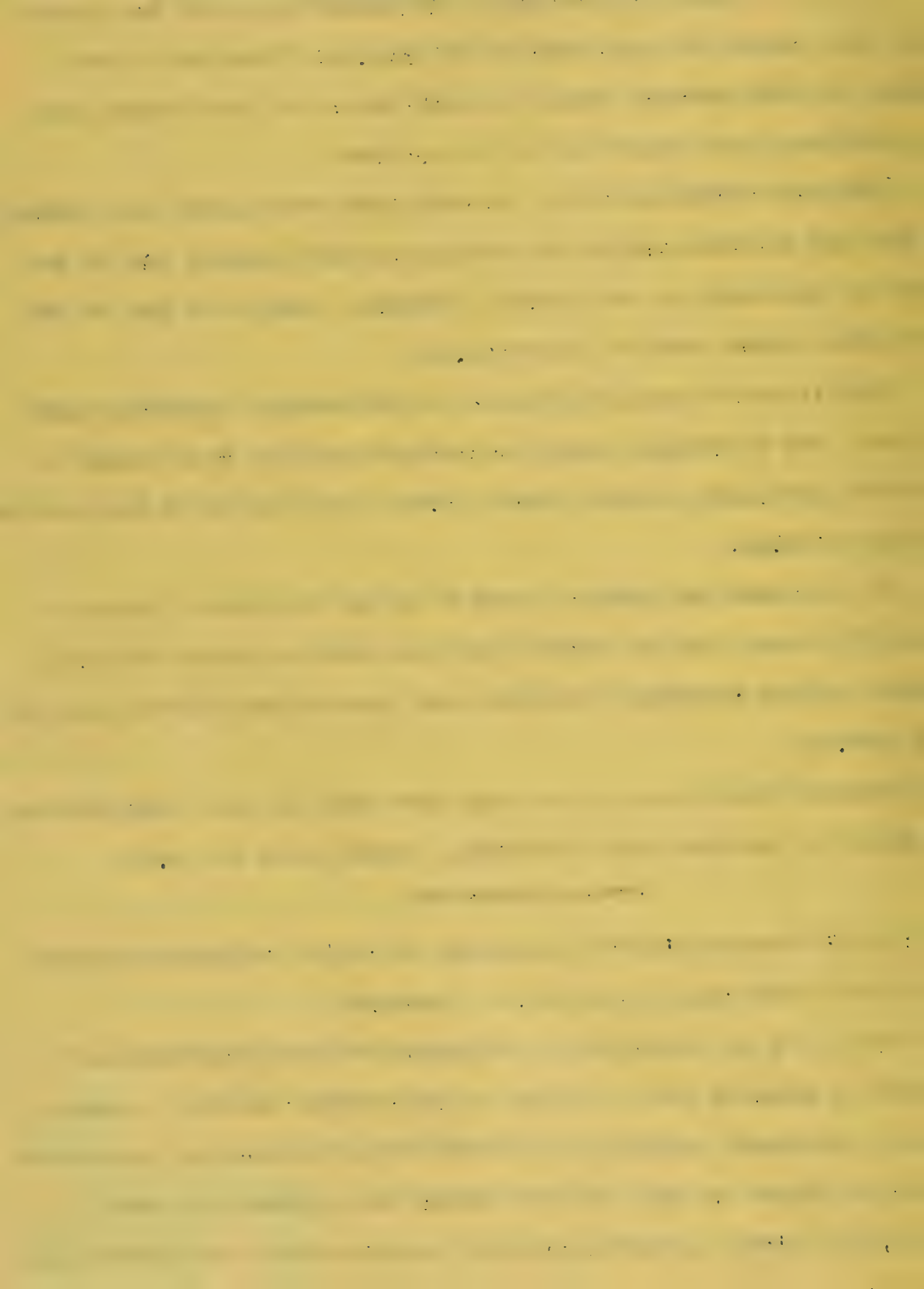
If you have any manure, work it in at the rate of about a bushel to 25 square feet of ground when you are preparing the soil. This animal matter furnishes nitrogen and humus which plants need for vigorous growth.

Decayed plant material of any sort that is free from disease is also good for gardens when thoroughly worked into the soil.

(1:15) Perhaps you're wondering if you're entitled to nitrogen fertilizer this year----and if so, how much.

Well, you are entitled to nitrogen for the essential war crops known as group-A crops. Those group-A crops include a number of the more important vegetable and fruit crops and several important oil and fiber crops, as well as some other crops grown for seed.

Then, there's a second group of crops either considered less essential in the war or that have less need for nitrogen. These crops are in group-B. You can get nitrogen for these group-B crops if you



have used it in the past or if fertilizer has been used in either of the past two years on the land where you are growing group-B crops. That is, the "B" crops will get nitrogen after the "A" crops get all they need. It is possible that there will not be enough nitrogen to take care of all "B" crops.

The next question is: What grades of nitrogen fertilizer can you get?

You are eligible for the grades that have been set up as substitutes for those that you formerly used. That often means a little lower percentage of nitrogen than the mixtures you used last year. But, by and large, it means enough nitrogen to produce good crops.

The final question is: How much nitrogen fertilizer are you entitled to for crops eligible for nitrogen?

For the group-A crops, you can get the fertilizer you need to make a crop. For the group-B crops, you figure your allotment by multiplying the number of acres you have by the amount of fertilizer an acre you have used in the past. But this rate in this state can not exceed the rate recommended by the University of Illinois College of Agriculture.

Incidentally, if you want the last word on this fertilizer question for Illinois, just drop me a card asking for "Restrictions and Suggestions for Wartime Fertilizer Practices," a leaflet published by the University of Illinois College of Agriculture.

CLOSING ANNOUNCEMENT: (:10) And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois, College of Agriculture, and the United States
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Acts approved by Congress May 8 and June 30, 1914

March 29, 1943

(FOR BROADCAST USE ONLY)

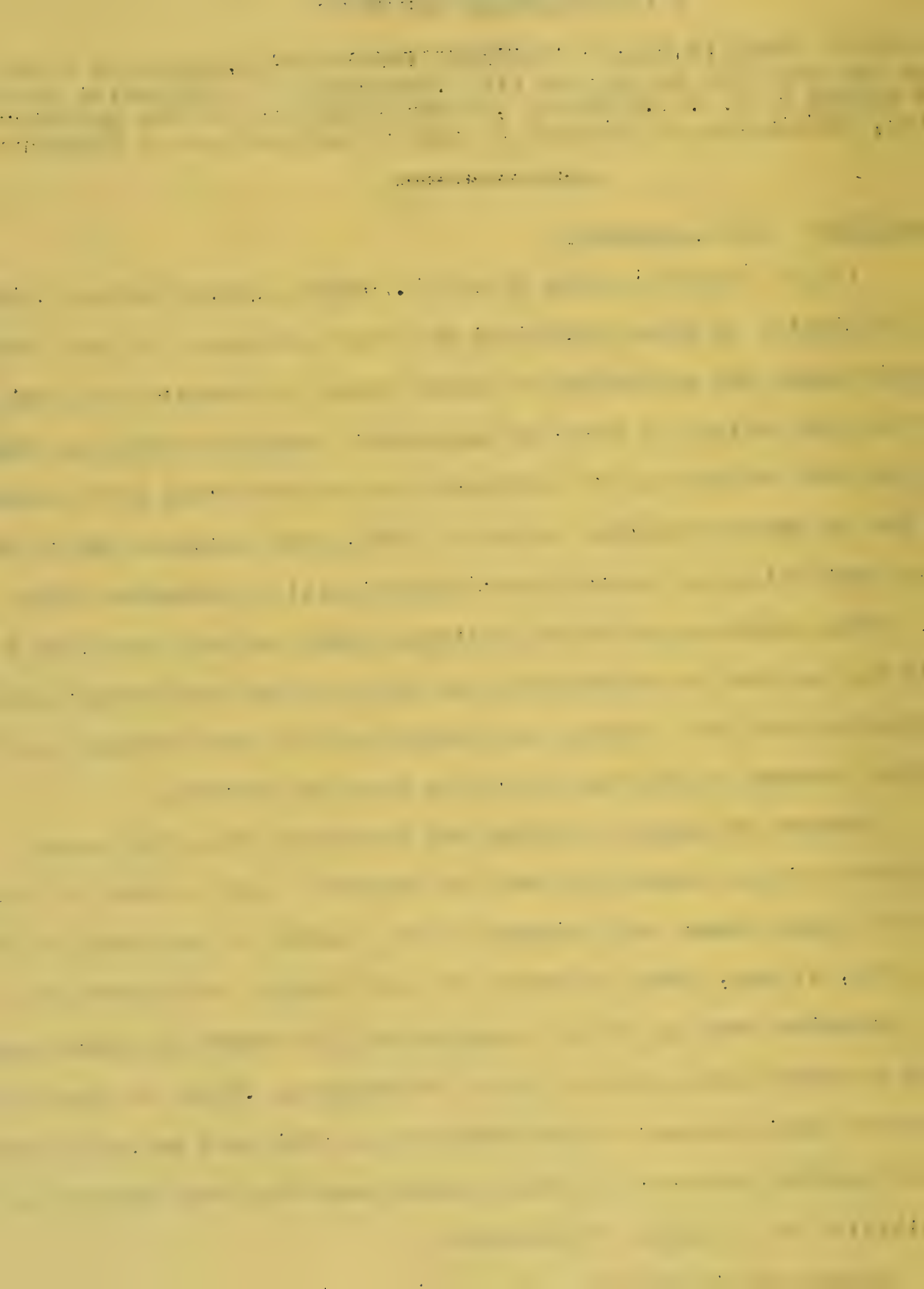
(Announcers: Here is today's ILLINOIS FARM FLASH, arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture at Urbana.)

Speaking time: 3:55 minutes

(1:30) Here's a note from V. G. Milum, apiculturist, University of Illinois, on sugar rationing and the beekeeper. He says that rationing boards are authorized to grant sugar allotments up to ten pounds for each colony of bees for necessary feeding in 1943 and five pounds for each colony may be borrowed from the ten-pound 1944 allotment. Due to the unfavorable season of 1942, many colonies had to be fed this past fall, and considerable feeding will be necessary this spring. Some colonies are short of stores right now and should be fed, while if the weather is unfavorable for good flights and nectar secretion from dandelion and fruit bloom, many colonies will need further feeding during the interval before the main flow from the clovers.

Because of sugar rationing and increased price for honey, large numbers of new beekeepers made an attempt to get a start in 1942. Because of a poor season and because of the removal of too much of the surplus crop, if any, their colonies are most likely to be short of stores. Likewise bees in trees in general will be short in stores and many such colonies will probably die of starvation. Those of you who have contacts with orchardists who depend upon wild bees as pollinators for fruits needing cross-pollination should warn the fruit growers of the possibility of a dearth of honeybees.

Beekeepers in general and particularly the beginners should be warned of the danger of removing too much honey from their colonies



this fall because of the possibility of sugar not being available for feeding in 1944. They should be advised that a colony may require anywhere from 30 to 60 pounds of honey depending upon the occurrence or absence of a good spring honey flow.

(1:15) In looking over the list of vegetables on page 16 of the Illinois Garden Guide we can select some of the vegetables seriously affected by insects and some that are hardly touched at all.

Let's take first those crops that are fed on to some extent by insects. Beans are the first ones we notice. Most of you are acquainted with the bean leaf beetle, the Mexican bean beetle and the potato leafhopper. The bean leaf beetle is fairly common over the state as is the leafhopper, but the Mexican bean beetle is found mostly in the southern half of Illinois. Other garden crops that will suffer from insect attacks are such things as cabbage, cauliflower, broccoli, eggplant, potatoes, tomatoes to a certain extent, melons and cucumbers. Now if you're going to raise these crops in your garden, and you probably will, you'd better plan on using some insecticides or doing hand-picking of insects. Folks with gardens twenty-five or thirty feet square will probably have more success by picking the insects and putting them into a can of oil. Those with larger gardens will want to use some insecticides.

This is not a suggestion as to what to plant in your garden, but what insects to expect. Now, if you plant such things as beets, carrots, turnips, lettuce, parsnips, peas and onions your insect problems are not so large. Insects do attack these crops but insect damage is much less common than on the plants mentioned first.

(1:00) Now a note on sharing labor and machinery. Trying to meet war needs, small farmers in many parts of the country are already



exchanging hand labor for machinery.

As spring work advances, agricultural economists forecast a wide spread in this form of neighbor cooperation.

On some small farms, farmers cannot afford to own binders, combines, tractors, or even two-horse equipment. And extra hands are scarce. So they are exchanging their own labor for use of machinery from other farms. Of course, a few farmers have followed this plan before.

One farmer who has a combine and no truck, and his neighbor has a truck and no combine can make a satisfactory exchange. They pool their labor and equipment and harvest the crop without much trouble. They couldn't do at all without the trade.

Groups of farmers in many sections will find it pays to get together to make the best use of the labor and machinery in the neighborhood. The group might well get together and agree on fair rates of wages, machinery hire and definite schedules for using the machinery.

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Speaking time: 7½ minutes

April 1, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCERS: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(:30) Saving protein now is a wartime necessity. There isn't enough of it on the market to fill the demands of hog raisers and cattle feeders. So feed good, green-colored legume hay plentifully until pasture is ready for use. Good legume pasture, according to E. T. Robbins, livestock extension specialist of the University of Illinois College of Agriculture, saves one-tenth to one-third of the corn and one-half of the protein supplements in the case of pigs. It helps keep them thrifty, too. After animals are turned on pasture, their need for purchased protein is greatly reduced.

(:30) Speaking of pigs, a question came up the other day concerning the advisability of butchering hogs that had been recently vaccinated for cholera. This party was interested in knowing if it had any bad effects on the meat. Well, we checked it with Robert Graham, head of the department of animal pathology and hygiene, University of Illinois College of Agriculture. He says it's a good idea to wait 14 to 21 days before butchering a hog that's been vaccinated for cholera. There's a reaction following vaccination---a fever, shall we say---and it isn't advisable to slaughter an animal for consumption under those conditions. Just a tip you may be able to use.

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(:30) Here's our safety thought for today. You know, using a dull hoe is like shaving with a dull razor. It's slow and a painful process. So if you "first-timers" in the victory garden program don't have a file, drop down to the corner hardware store and pick up one this evening. If there aren't enough files to go around, buy one in partnership with your neighbor. Take good care of it, too, keep it inside where it's dry---not sticking out in the ground where you last sharpened your hoe. And put a corn cob on the pointed end. It'll make a fair handle and it's less dangerous. Otherwise, someone might fall on it and end up in a hospital instead of a victory garden.

(1:30) While we're on this subject of accidents and gardens here's an item on brush burning danger. It's about burning the piles of brush after you clean up the land, or even burning over the land first to clear off the weeds and brush. Foresters say burning debris and brush is bad business - especially in wartime.

They recommend that farmers increase their crops this year with as little use of fire as possible, especially if there are any woodlands nearby. They suggest plowing under sedge grass for fertilizer when cultivating a field. They suggest laying brush in gullies to help check erosion, or piling it in an unused area and allowing it to rot.

Fires not only burn up good soil values, but often get away into the woods and destroy timber needed for war. Furthermore farmers are called away from productive work in the fields to stop the fires. Remember, too, that persons causing fires that endanger war timber or industries are now liable to prosecution under the sabotage laws.

If you have to burn material, here are a few precautions to take. Burn late in the afternoon - after 5 o'clock when the wind is down. Choose a calm day, preferably less than 24 hours after a rain. Then, plow or rake a safety line around the material you are going to burn and have hoes, rakes, shovels and water handy so you'll be ready if the fire starts to spread. Begin to burn on the uphill side. Stay with the fire all the time; don't leave it 'til it's perfectly safe. Afterward it's a good idea to water down stumps and to examine the area carefully next day for sparks or smoke.

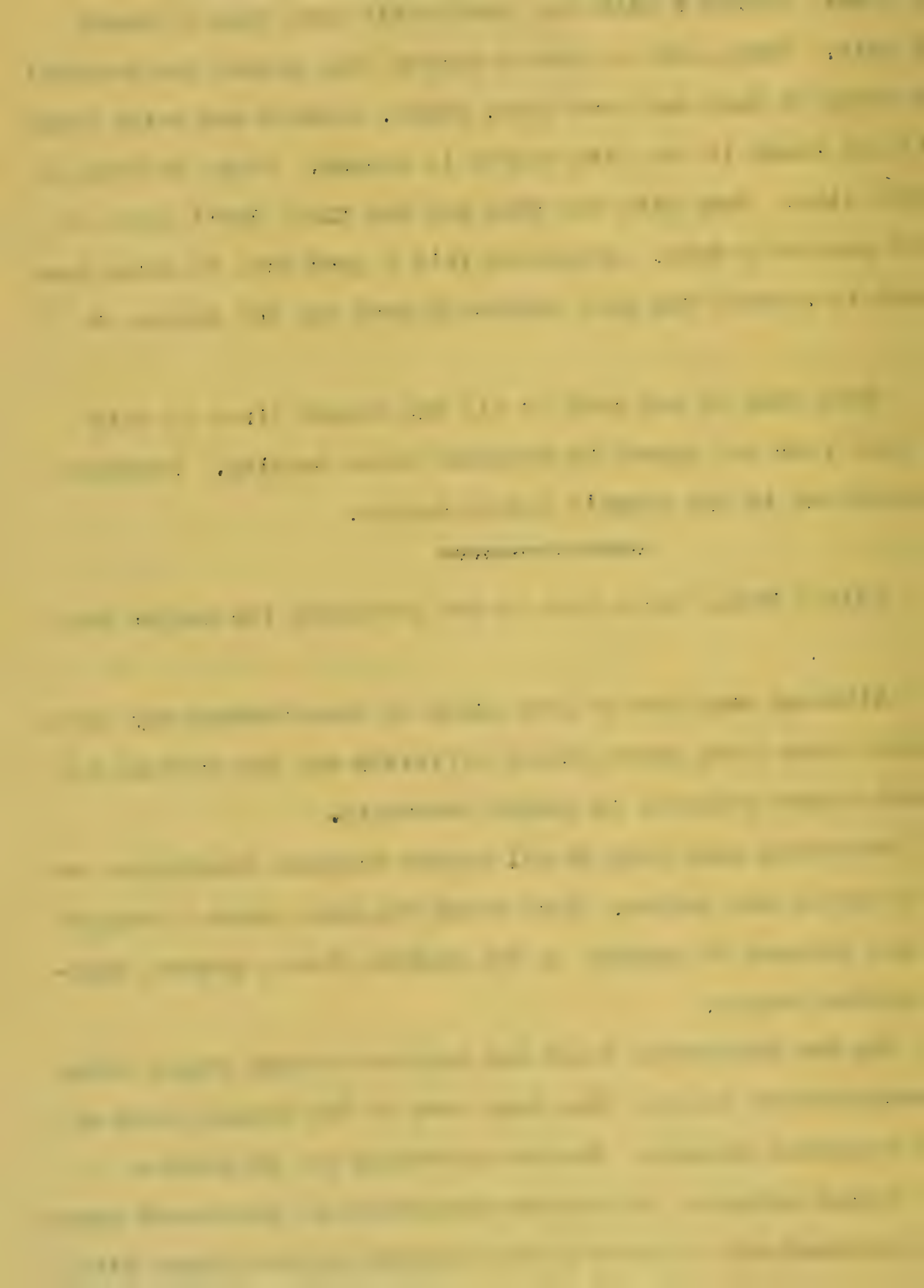
More than 15 per cent of all the forest fires in this country each year are caused by careless brush burning. Remember, our carelessness is the enemy's secret weapon.

(1:00) Well, now a note on the prospects for copper sulphates.

Although supplies of some kinds of insecticides may prove rather short this year, agricultural officials say the outlook for widely used copper sulphate is rather favorable.

Something over half of all copper sulphate fungicides are used for potatoes and apples. Next among the main users of copper sulphate are growers of peaches on the Pacific Coast, grapes, tomatoes and citrus fruits.

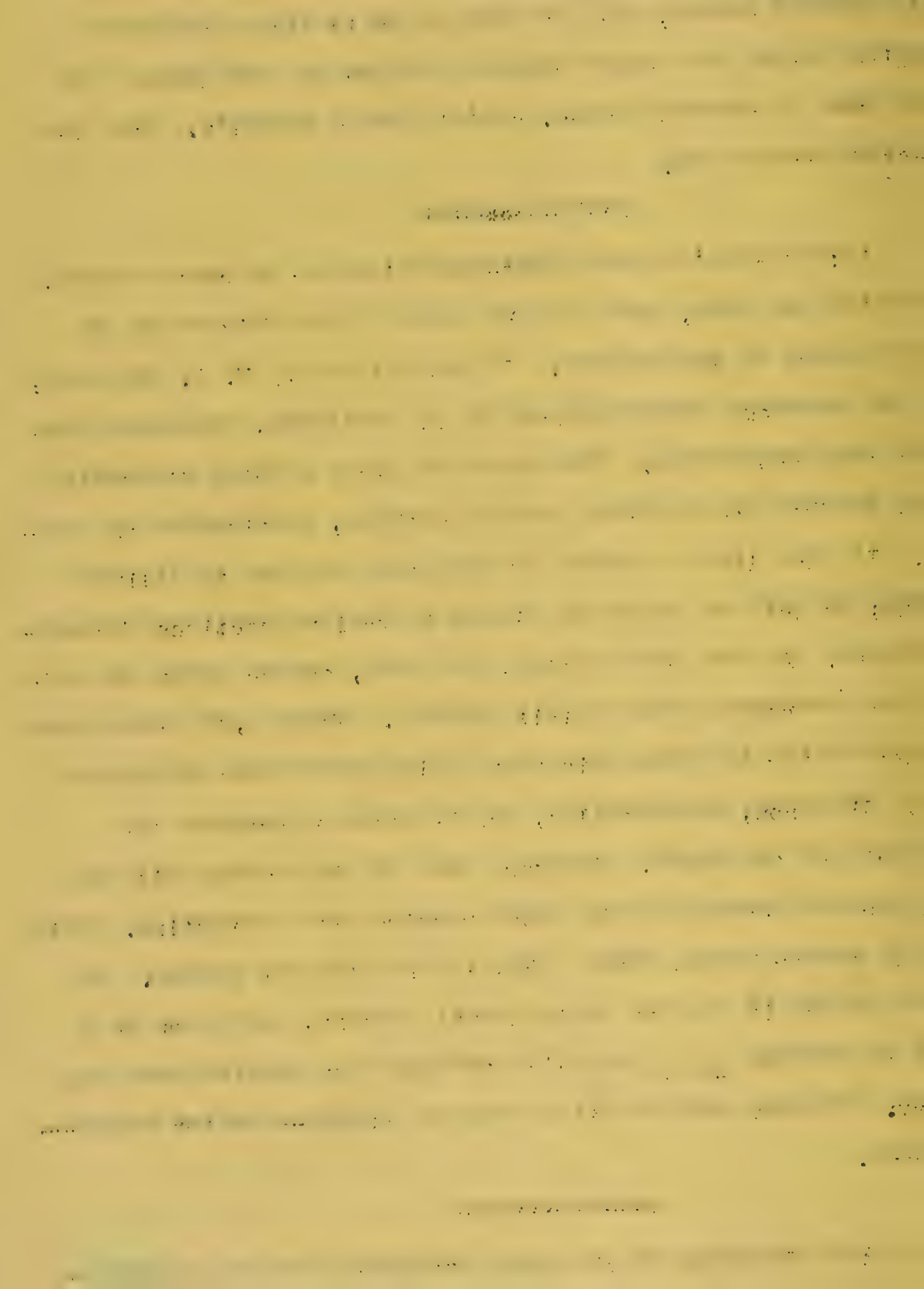
The War Production Board has allotted enough copper scrap to the manufacturers to more than take care of the normal needs of fruit and vegetable growers. Besides providing for 80 million pounds of copper sulphate for regular distribution, government agencies have arranged with members of the industry to hold about five million pounds in reserve at various points in the country to take care of any unexpected disease outbreaks.



Copper sulphate is a material fruit and vegetable growers can get for their ordinary needs without restriction. For amounts up to 15 hundred pounds, all you need to do is sign a statement that you're buying the copper sulphate to use on farm crops. To get more than 15 hundred pounds, you'll need a priority. But that won't affect many of us.

(1:00) Here's a new eight-page circular on castor beans, an industrial war crop, just off the press at the University of Illinois College of Agriculture. It was written by W. L. Burlison, head of the agronomy department, and R. F. Fuelleman, assistant professor of crop production. This circular gives a brief discussion on soils, seedbed preparation, seeding methods, cultivation and harvesting. It also lists a number of varieties adapted to Illinois conditions, as well as tables on yields in various sections throughout the state. At the present time, you know, castor beans are primarily a war emergency crop in this country. About 1,000 acres have been allocated for Illinois this year to be grown under government contract. The crop, incidentally, can be grown throughout the southern half of the state. However, most of the acreage will be in small parcels because of the labor required for harvesting. This circular on castor beans, number 551, is free for the asking. If you'd like to add it to your agricultural library, just drop me a card here at station _____ and I'll see that you receive your copy right away. You may call for it by name or number---castor beans---number 5-5-1.

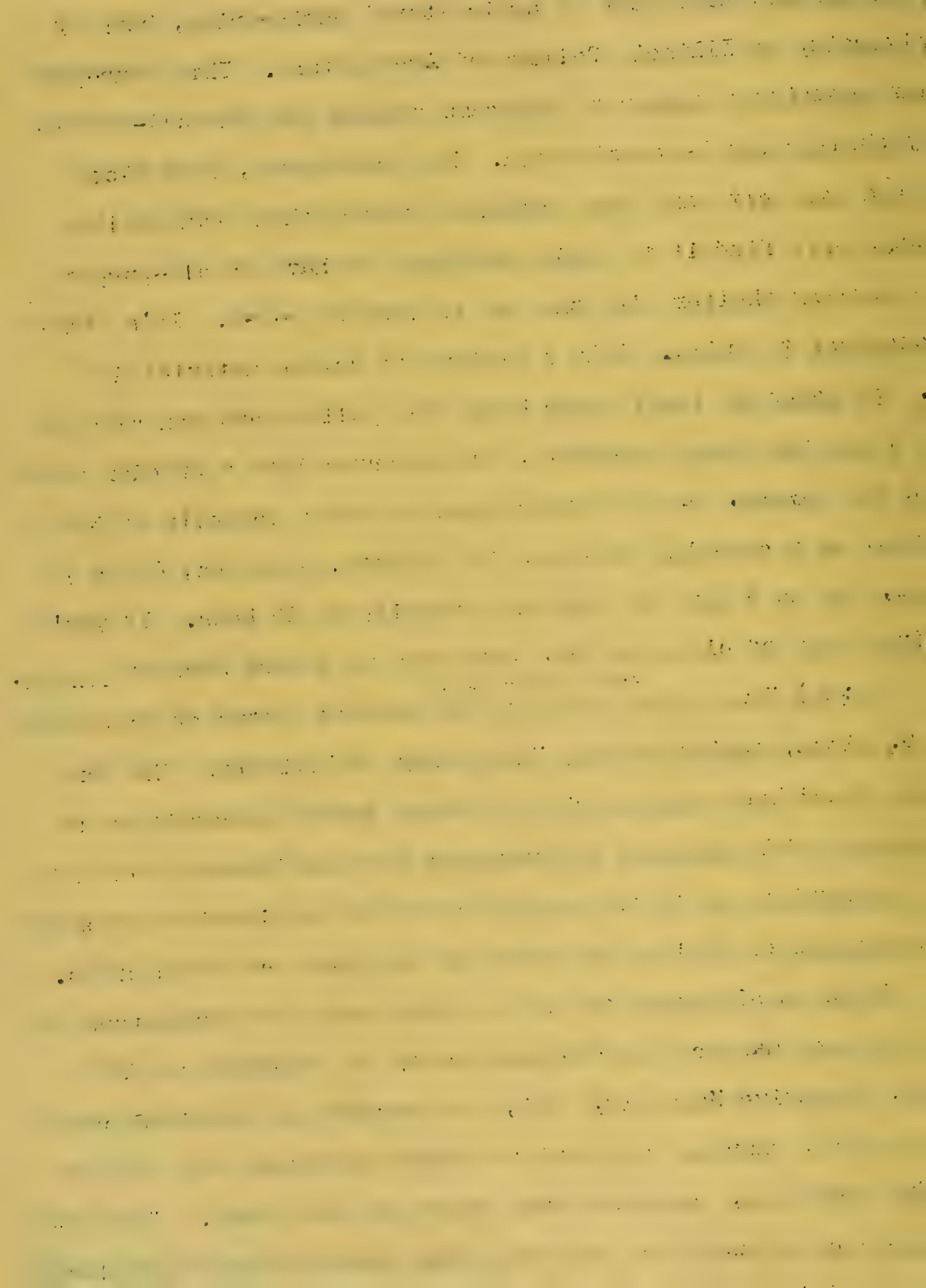
(1:00) Speaking of circulars available for free distribution, we have another one to offer this morning on an all-purpose



poultry shelter. It's number 5-5-2. It was written by H. H. Alp, associate professor of poultry extension, now on leave in Brazil, and D. G. Carter, professor of agricultural engineering, both of the University of Illinois College of Agriculture. This four-page circular contains a number of diagrams showing how the all-purpose poultry shelter can be constructed. Now poultrymen, farm flock owners and even city and town families raising their own poultry these days will find it to their advantage to have an all-purpose movable poultry shelter like the one in leaflet 5-5-2. It's simple and economical to build. Only a minimum of scarce material is needed. It makes an ideal range house for pullets and can also be used as a pen for young cockerels, or converted into a brooder house or a pen for layers. As a brooder house it has a capacity of 300 to 350 chicks, as a roosting shelter, 200 pullets; as a pen, 60 to 75 cockerels, and as a pen for layers, a capacity of 30 hens. If you'd like a free copy of circular 552, just drop me a card here at _____.

(1:30) Now a final note on the present status of beekeeping from V. G. Milum, agriculturist, University of Illinois. The War Production Board has recently given further special recognition to the importance of beekeeping in producing food and beeswax needed in many war industries and to the need of bees for pollination necessary in the production of fruits and seeds of vegetable and field crops.

While no allotment of tin is being made for manufacture of honey containers smaller than 60-pound cans, an amendment to WPB Order M-81, effective March 12, 1943, now permits an unlimited pack of honey in 60's, whereas the previous order permitted only 100 per cent of the 1942 pack, which in many areas was very short. This unlimited pack was allowed for only two other commodities, blood plasma and nicotine sulphate.



In the matter of bee supplies, beekeepers are also in a much better position because of an amendment to WPB Order L-170, dated March 6. The production of beekeepers' supplies, other than hives, frames, replacements and repairs, has been increased from 38 up to 100 per cent of 1940 or 1941 production. There are now no restrictions on the manufacture of beehives and frames. Under a recent WPB ruling (Limitation Order L-170), bee smokers and bee veils may be considered as repair items, which with replacements now have a quota of 166 per cent of 1940 or 1941.

Because these changes in quotas have come at a late date, and because of government orders, most bee supply manufacturers will have some difficulty in meeting the demands for this year's crop, but all report they will do everything possible to increase their production.

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University of Illinois, College of Agriculture, and the United States
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630.7
1161

TWENTY-SEVENTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture)

Speaking time: 8 $\frac{1}{4}$ minutes

April 5, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCERS: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(:45) Some fruit growers allow their brambles to grow so close together that it's like trying to produce good corn planted 10 stalks in a hill, says V. W. Kelley, extension horticulturist, University of Illinois College of Agriculture. In order to produce large berries, brambles must be grown in rows or hills and properly pruned. Pruning brambles grown in rows should consist of removing the dead canes which bore fruit this past year. Narrowing the rows to about two feet in width is another good practice. We shall want to save the large canes for fruiting and cut out the weaker canes. Then, too, head back the laterals to about a foot in length and the unbranched canes to about four feet in height. To prune black and purple raspberries, follow the same directions. Further information on caring for the home fruit garden is contained in circular 524. It's free for the asking. Just address your request to this station.

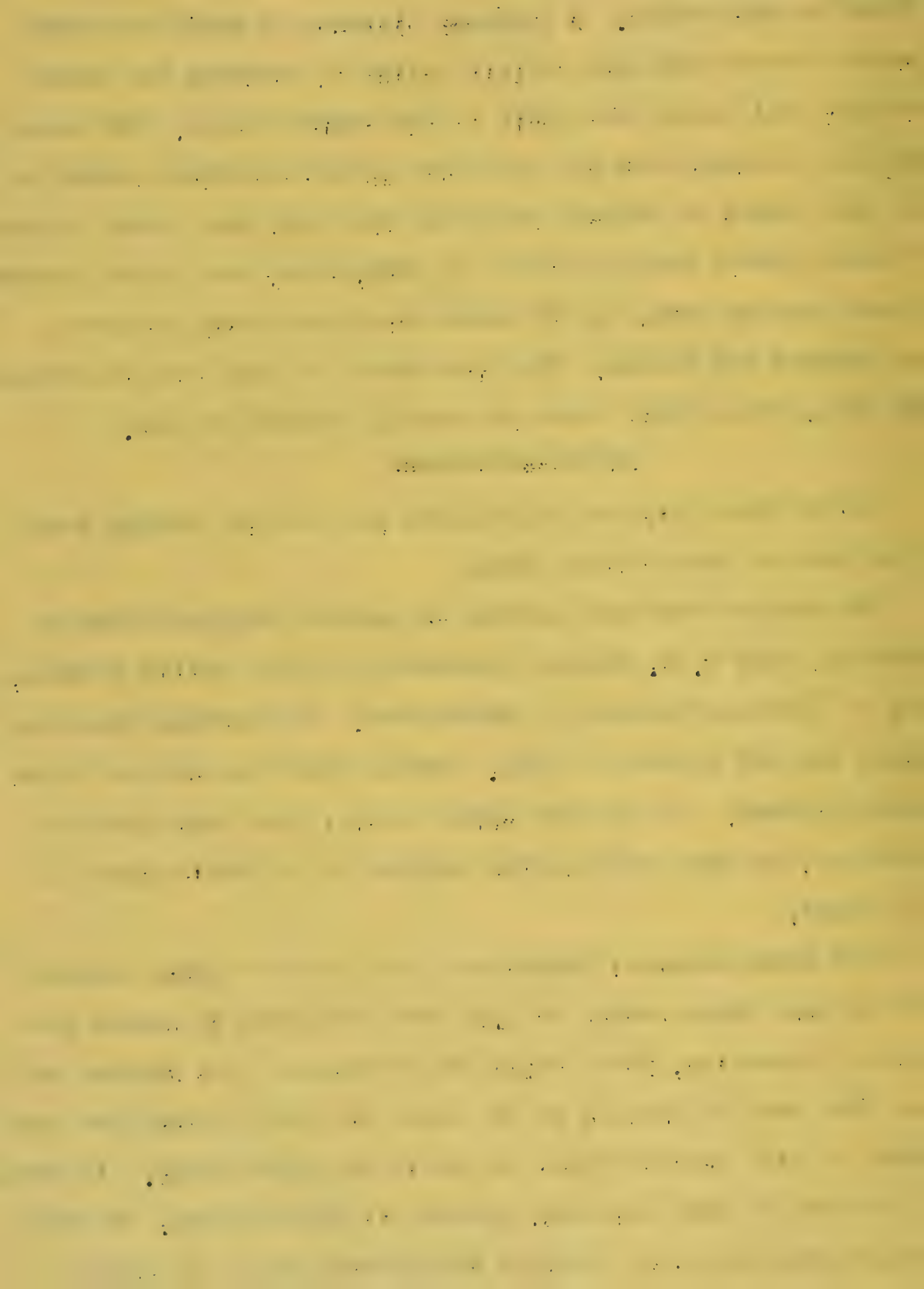
(:55) Speaking of caring for brambles, here's a note on timely care of dooryard trees from S. C. Chandler, field entomologist of the Illinois State Natural History Survey. Although spraying is necessary for full and satisfactory control of most pests of fruit trees, owners of dooryard trees can do other things that help control certain insects, even though they don't have equipment for spraying

big trees. The appleworm, sometimes called the codling moth, passes the winter in cocoons in crevices under loose flakes of bark and in coarse trash on the ground. A thorough clean-up of such situations before apple blossom time has definite value in reducing the number of worms that will infest the fruit in the coming season. The loose bark should be scraped from the trunk and larger branches, caught on a canvas, and burned to destroy the worms that have made their cocoons there. Coarse trash, such as pieces of wood, heavy weed stems, parts of boxes and pruning wood, all of which often have worms attached, should be removed and burned. The fire should be away from the trees, not under them, since fruit trees are easily injured by fire.

(1:05) Now a tip for you fellows who will be turning your cows out on pasture one of these days.

The change from barn feeding to pasture feeding should be made gradually, says W. B. Nevens, professor of dairy cattle feeding, University of Illinois College of Agriculture. This avoids digestive disturbances and off flavors in milk. Merely lower the rate of feeding of grain mixture. If the cows refuse grain, take them from the pasture earlier, or feed grain in the morning after they've been on drylot all night.

With good pastures, Nevens says one pound of grain mixture is needed for each three pounds of milk over and above 30 pounds produced daily by Holsteins, Brown Swiss and Ayrshires. For Jerseys and Guernseys, the rate of feeding is one pound of grain mixture for each three pounds of milk produced over and above 20 pounds daily. In early spring, a mixture of corn and oats, ground, is satisfactory. As soon as grass approaches maturity, protein supplements should be used to bring the protein content of the mixture up to 15 per cent. Then, too,

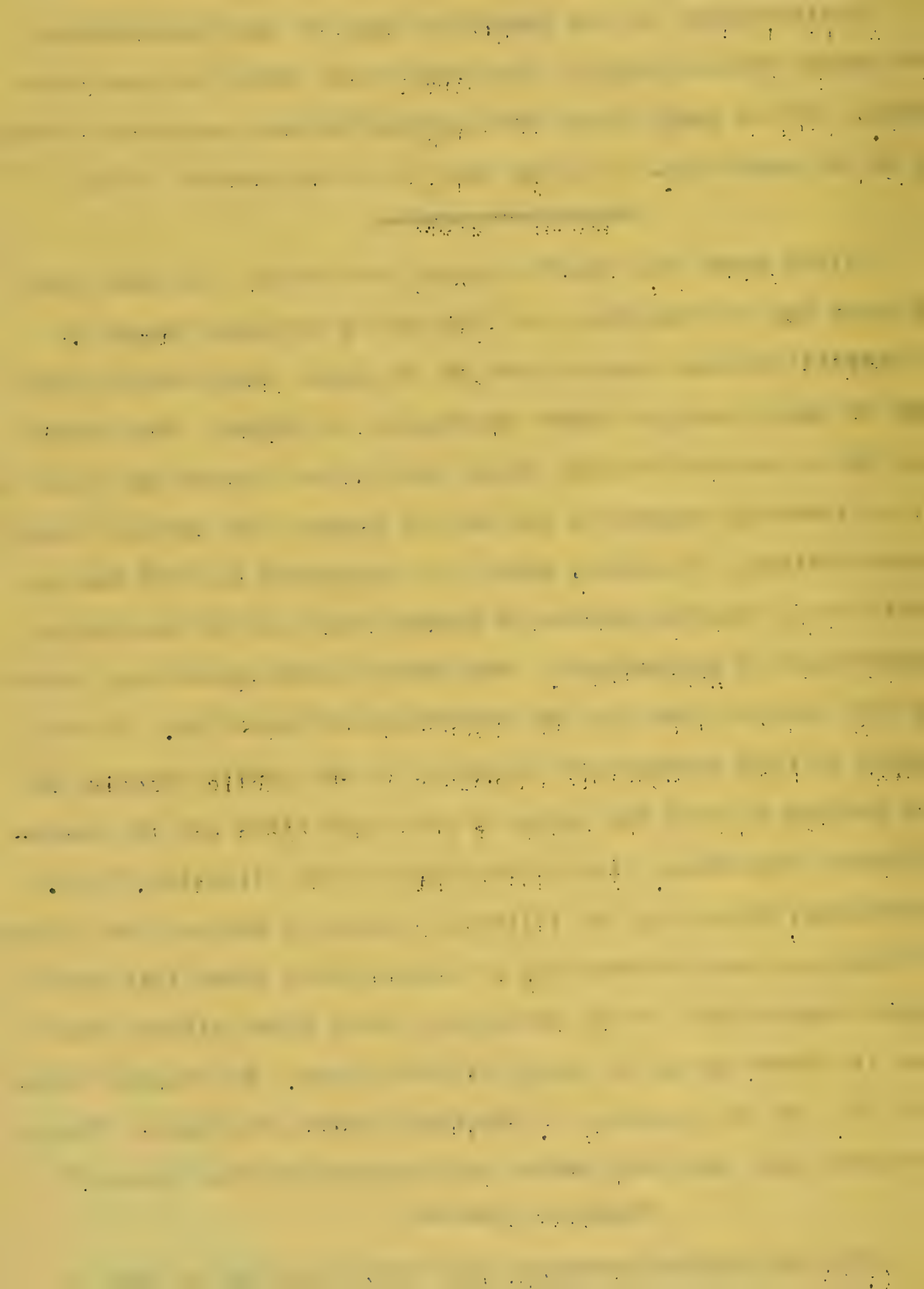


as the grass ripens, cows eat less of it and it's necessary to feed grain mixture at a heavier rate.

Incidentally, if you haven't a copy of that pocket-size circular number 502 on feeding the dairy herd, write for your free copy today. It's a handy thing for dairymen to have around in wartime as well as in peace time. You may call for it by number, 5-0-2.

(1:00) April 16, that's a week from Friday, has been proclaimed Arbor Day for the State of Illinois by Governor Dwight H. Green. There'll be some curtailment of the usual large scale field plantings of trees owing to labor shortages, of course. But there's no reason why we shouldn't plant those shade trees around the house or probably a flowering dogwood or red bud to enhance the natural beauty of our surroundings. You know, Arbor Day originated in 1872 through the efforts of J. Sterling Morton, a former secretary of the United States Department of Agriculture. And thirty-eight states and Puerto Rico now have enacted laws for the observance of Arbor Day. It's a day on which to hold appropriate exercises in the public schools and elsewhere tending to show the value of trees and birds and the necessity for their protection. In calling this to our attention, R. W. Lorenz, forester, University of Illinois College of Agriculture, points out that there are many reasons why we should plant trees this year. The war has brought this to our attention, since being without wood in wartime is almost as bad as being without bread. So remember Arbor Day, April 16. As its founder, J. Sterling Morton, has said: "Other holidays repose upon the past; Arbor Day proposes for the future."

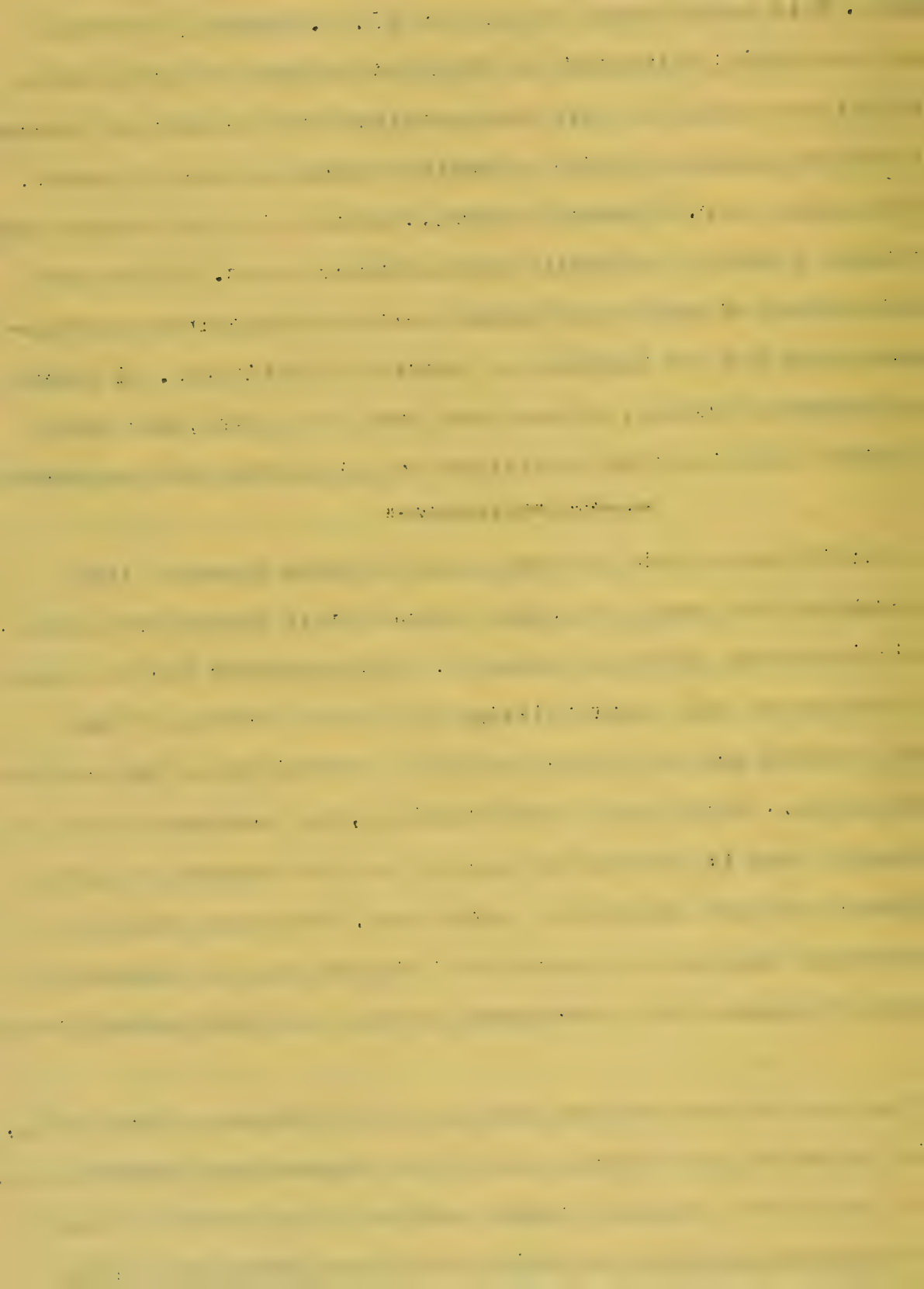
(:45) One hundred seventy-eight March pigs raised from 18 gilts without special attention at farrowing time sounds to me like



some kind of a record. At any rate, that's an average of almost 10 pigs to the litter in these days when we're trying to make every pork chop count. This report comes to us from E. T. Robbins, livestock extension specialist, University of Illinois College of Agriculture, who says that the secret of this low mortality rate in pigs at farrowing time was the result of rigid selection through a term of years. Charles Cheeseman, Jr. of Carroll county, turned the trick a year ago. He's developed a herd of naturally good motherly sows. He has ear-marked the litters of sows which proved disappointing in any particular or whose pigs did not perform and develop to suit him. In saving gilts from unmarked litters, he has been sure, at least, that their ancestry fitted well into the conditions of his feeding and management.

(1:45) During the past two years Illinois farmers, like others throughout the corn belt, have reduced their forage crop acreages while increasing livestock numbers. This situation has been made much more serious by the winterkilling of a large portion of the established alfalfa and red clover seedings, especially in the southern half of the state. With normal seed supplies, this emergency could be met more easily than is possible at present because stocks of alfalfa and red clover seed are practically exhausted. This means that to provide necessary supplies of forage most farmers will be compelled to use mixtures of legumes with non-legumes if they seed the needed forage acreage.

Because of this extreme shortage of alfalfa and clover seed, it's doubly important that farmers seed these legumes with utmost care. No alfalfa, red clover or sweet clover seed should be wasted on sour land or on phosphorous-deficient soils where these crops have little or no chance to grow. Soybeans seeded for hay should be thoroughly inoculated, as should the clovers.

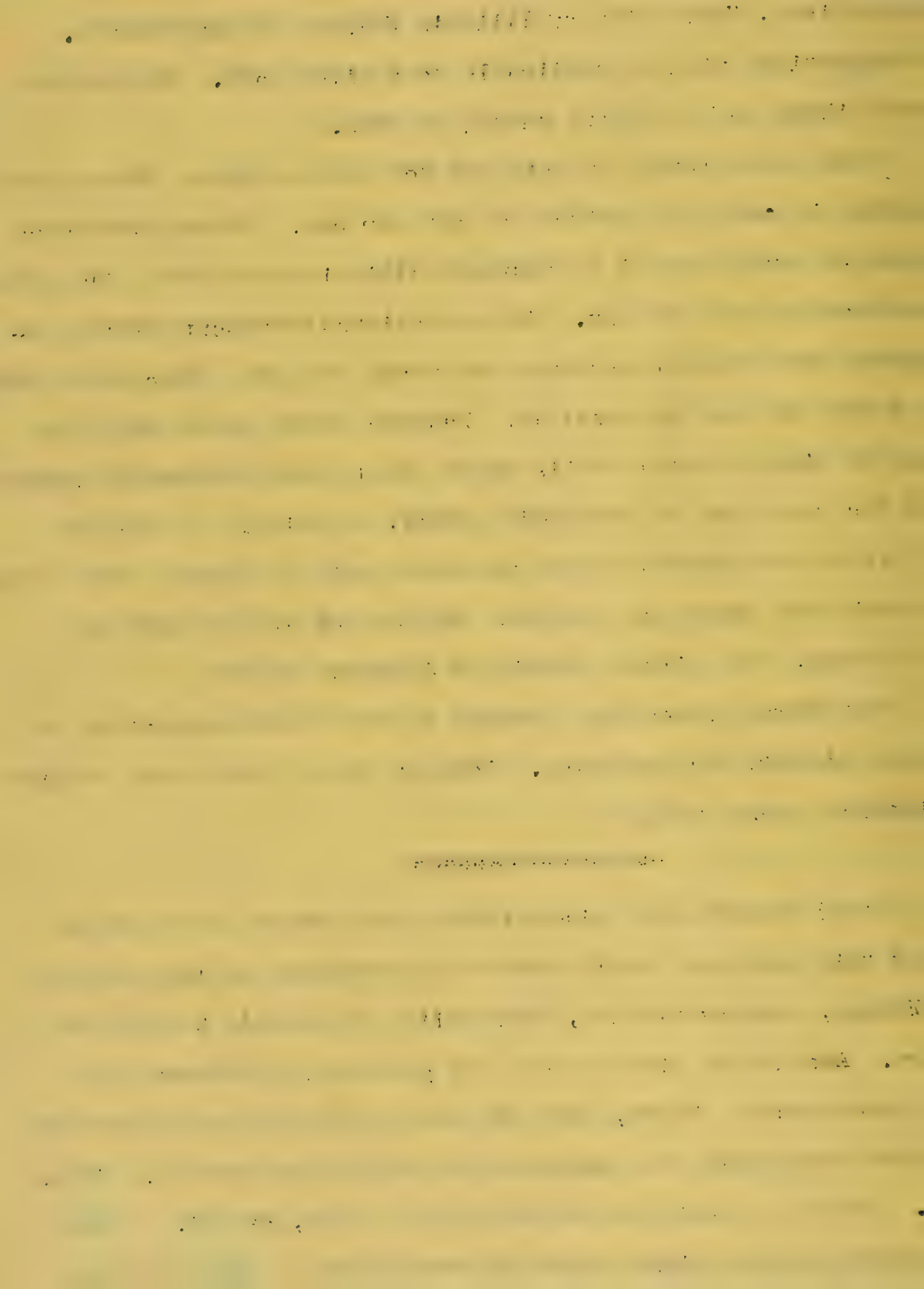


Now here are a number of suggestions which may be useful in solving the problem on individual farms as arranged by crop and live-stock specialists, University of Illinois College of Agriculture. Not all suggestions will be applicable to a given farm. The suggestions most likely to be helpful should be used.

Seed sweet clover in oats now for fall pasture. Sweet clover grows rapidly if oats are pastured or cut for hay. Korean lespedeza may be sown in south central or southern Illinois with oats. The oats may be pastured or cut for hay. Use established permanent pasture until emergency and rotation pastures are ready for use. Give permanent pastures a rest as soon as possible. Pasture winter wheat and rye, especially on highly fertile soils where small grain frequently lodges. Oats sown for grain may be pastured lightly, especially on fertile soils, if stock are removed before the oats begin to joint. Seed oats in early April for emergency pasture. Millet may also be used as emergency forage. Use either foxtail or Japanese millet.

Your farm adviser has a number of excellent suggestions on soybeans and alfalfa for pasturing. Contact him or your local wartime school district leader today.

(1:15) There's one soil-building practice we can't afford to overlook this year and that's pasture improvement, in the opinion of E. D. Walker, conservationist, University of Illinois College of Agriculture. And he has listed steps for pasture improvement in a one, two, three order. First, test the soil to see how much limestone is needed and then apply the limestone as quickly as possible. Next, disk well. Don't be afraid of tearing it up. Then, reseed. Walker suggests about seven or eight pounds of sweet clover, three or four pounds each of red and alsike clover and three or four pounds of timothy. In southern Illinois, add some lespedeza. Now if you don't



get around to doing that this spring, wait until fall. But keep in mind that you'll double your pasture forage whenever you do it.

Pastures handled in such a way this spring should not be turned on until the first of July. Even at such a late date you'll still get as much pasture as you would in an entire season had the pasture not been improved. In our all-out effort for the production of dairy products and meat, let's do everything we can to protect our feed supply. If improved pastures will double our amount of forage, let's test and treat the soil, disk well, reseed, control grazing and clip weeds later on. These five steps on pasture improvement are contained in a small mimeograph leaflet by the same name. It's number 959. If you'd like a free copy, just drop me a card here at _____. Ask for the leaflet 9-5-9 on pasture improvement.

(:45) You folks who will be planting cabbage plants within the next few weeks will want to check them to see if they have an infestation of aphids or plant lice. Plants that are home grown very seldom have aphids on them, but on those shipped in you'll very often see a few of these soft-bodied, sluggish insects. It's a wise precaution to examine each plant rather closely to see if any aphids are present. If they are, they should be removed before the plants are set in the garden. If you have too many plants to inspect individually, examine a few. If you see signs of aphids, prepare a soap solution of nicotine sulphate and while the solution is at a temperature of 70 degrees, dip each plant into the solution. This will kill the aphids.

Early infestations of this insect in the garden are often the result of the pest being carried in on the plants when they are set out. The preparation of this dip is given in the insect control section of the Illinois Garden Guide, circular 522, or a separate leaflet may be obtained. It's entitled "Insecticides for the Victory Garden."

CLOSING ANNOUNCEMENT: (:10) And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois, College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director.
Acts approved by Congress May 6 and June 30, 1914

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TWENTY-EIGHTH ILLINOIS FARM FLASH (From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 7½ minutes April 8, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois, College of Agriculture, Urbana.

(:30) Makeshift equipment is always dangerous, particularly makeshift ladders that are broken or coming apart. If today you were to climb a ladder to the barn loft and you fell and broke a leg because of a defective rung in the ladder, it wouldn't only be expensive, but you would lose a lot of valuable time when work in the fields and gardens is essential to getting the food production job done. Be sure your ladder is safe and that it rests solidly at top and bottom before you use it. Incidentally, when climbing a ladder, grasp the sides with your hands, not the rungs. It's a lot safer.

(1:15) It takes more effort to plow under organic matter than it does to touch a match to it, but an extra 10 to 20 bushels of corn should be worth some trouble. That's a suggestion which comes to us today from C. M. Linsley, assistant professor of soils extension, University of Illinois College of Agriculture, in cautioning farmers not to burn up fertility.

The burning of straw from a good crop of soybeans means the loss of about 65 pounds of nitrogen and two tons of organic matter to the acre. If purchased in a commercial fertilizer this amount of nitrogen would cost about eight dollars an acre. The burning of a crop of second-year sweet clover causes even a heavier loss of nitrogen

THE REPORT OF THE

COMMISSIONERS OF THE LAND OFFICE

FOR THE YEAR 1914-15

IN RESPONSE TO A RESOLUTION OF THE HOUSE OF COMMONS

PASSED ON 12TH MARCH 1915

BY THE COMMISSIONERS

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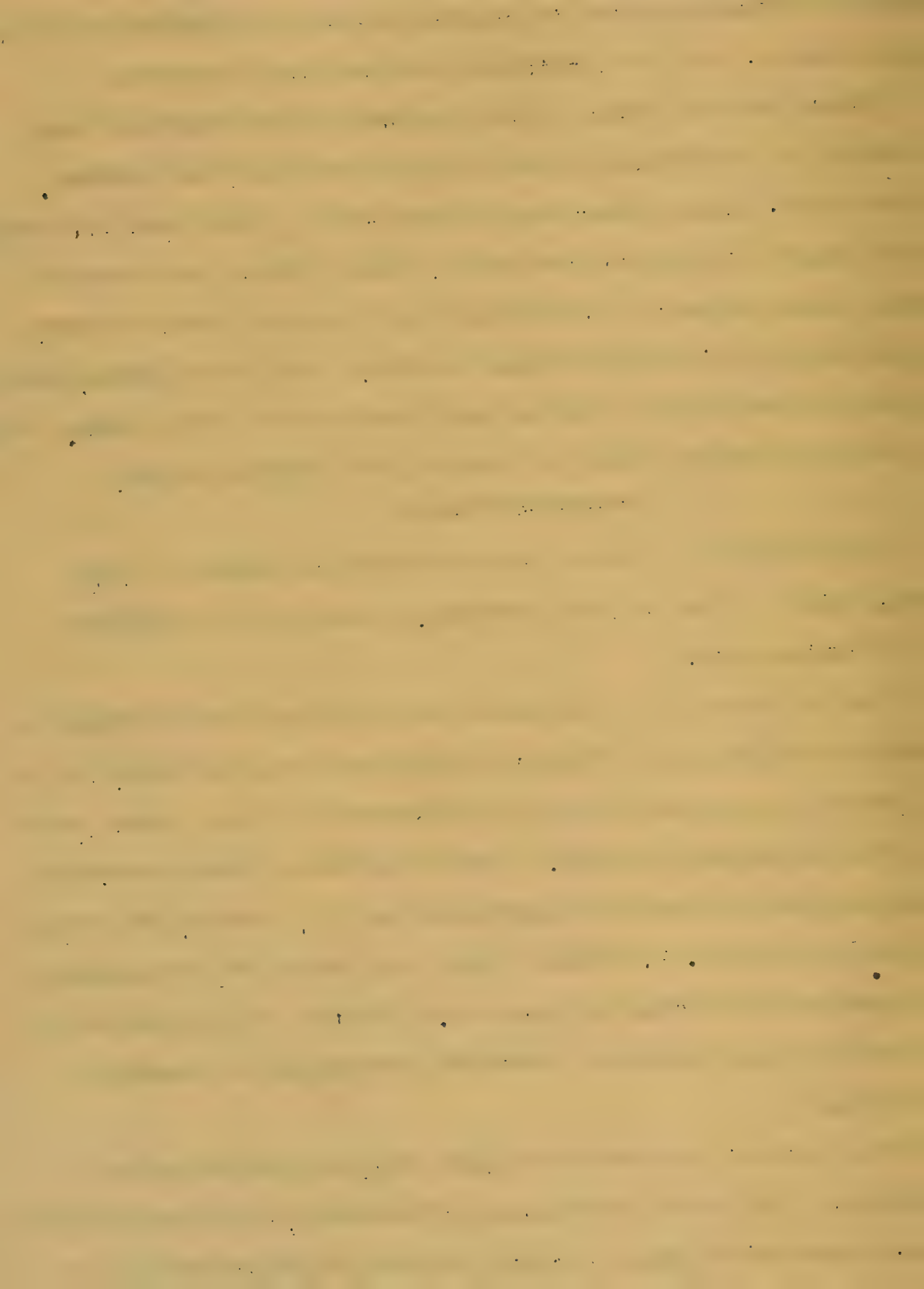
and organic matter. An acre of this crop when burned destroys 120 to 150 pounds of nitrogen and three to four tons of organic matter. The destruction of organic matter is causing our soils to become heavier, drain more slowly, hold less moisture and wash more seriously.

Where soybean straw is left bunched by the combine, these bunches should be scattered by hand or raked and used for bedding. At the same time, disking down second-year sweet clover when it's dry and brittle makes it easy to turn under. Many farmers are plowing under these heavy crops of second-year sweet clover, straw or corn-stalks and doing it without too much trouble. They use a large, sharp coulter and in some cases a jointer and trash wire in the furrow. It's always a case of plowing under not burning off organic matter.

(:45) Here's a little item on poultry I picked up from L. E. Card, chief of the poultry division, University of Illinois College of Agriculture.

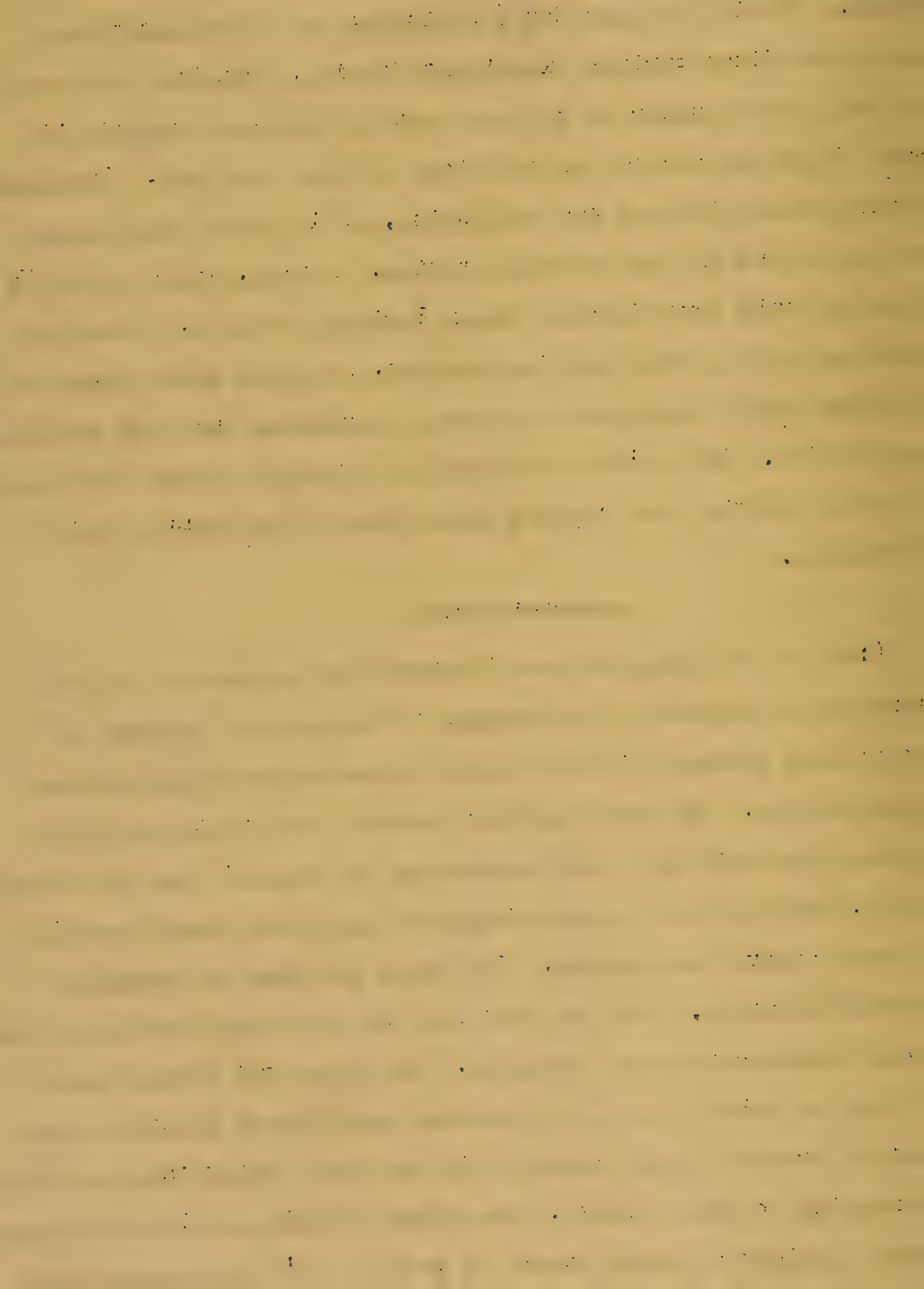
One of the ways we can reach the eight per cent increase in egg production called for in Illinois this year, Dr. Card says, is to see that our best cockerel chicks are distributed to the flocks where they can show the maximum results. While the United States average egg production for each hen this past year was 113, the 60,000 pedigreed United States R. O. P. (that stands for Record Of Performance) candidates averaged 171 eggs for each hen. That's an increase of 58 eggs for each hen and shows gain possible through use of superior breeding stock.

The poultry industry has always met the egg-production goals regularly. But with our supplies of equipment, housing and feed all limited, maybe we're going to cast our eye on the other half of the laying flock for future production gains. It looks like a problem for the breeders to increase the rate of lay of the average hen.



(:45) I'd like to take a minute to tell you about the Hereford cattle auction sale of the University of Illinois College of Agriculture. It will be held May 6 beginning at 12:30 near Robbs, Illinois, at the Dixon Springs Experiment Station. Now May 6 is some-time off yet, but a number of you may want to receive a catalog to learn more about the records of the stock offered for sale. Incidentally, that catalog is free for the asking, so if you'd like a copy just drop me a card in care of this station. Anyway, there'll be 33 head of cattle sold down there at Dixon Springs on May 6. There are eight yearling bulls, five yearling heifers, six cows with calves at side and eight open two-year-old heifers, purebreds and high grades, horned and polled. If you're interested in Hereford cattle, I'd suggest you write for the free catalog about those to be sold on May 6 at Dixon Springs.

(:45) In treating hotbeds intended for production of sweet potato sprouts, a solution of six pounds of borax in 30 gallons of water may be used instead of the standard formaldehyde disinfectant, which is now scarce. If there has been trouble with black rot in a previous crop, the soil and spent manure may be removed from the inside of the frame, and all sweet potato fragments and other waste material near the frame removed and burned. The frame can then be sprinkled with the borax solution. The new soil for the bed should be taken from a field never planted to sweet potatoes. The black rot fungus doesn't attack or live on other plants, so rotation keeps clean sprouts clean. Sweet potatoes are safe from black rot in the field after three or four years of cropping to other plants. The black rot disease is widespread and no immune variety of sweet potato is known. It's destructive both in the field and in storage.



(1:00) Farm woodland owners who have occasion to negotiate with local draft boards to maintain farm labor should be aware that woods work may be applied in figuring farm units, advises J. E. Davis, extension forester with the University of Illinois College of Agriculture and the State Natural History Survey, and chairman of the Illinois Wartime Timber Marketing Committee.

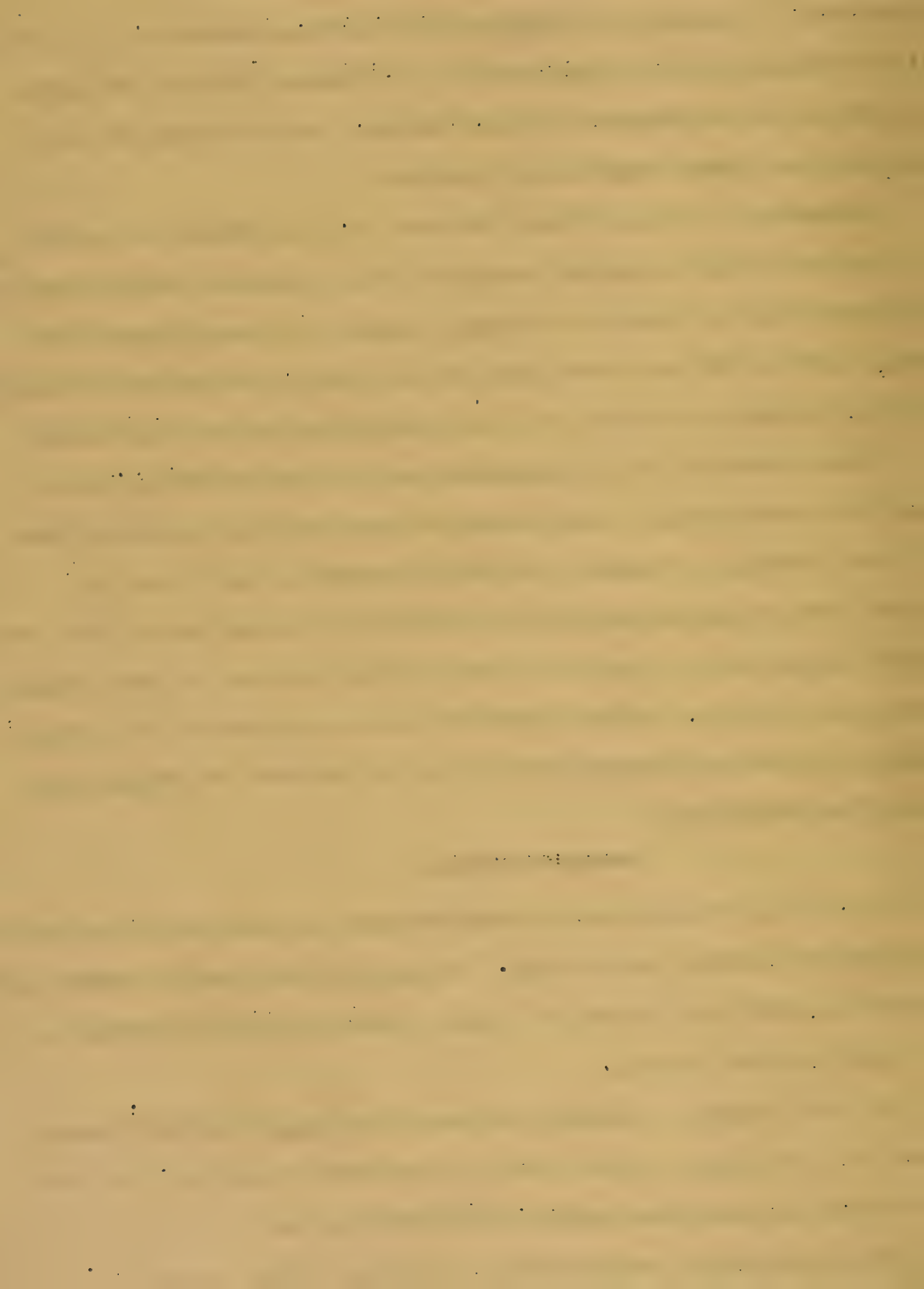
According to Local Board Release No. 175 which set up the Classes II-C and III-C to cover essential farm workers, delivering 10 thousand board feet of logs or piling, sawing 5 thousand board feet of lumber, cutting 200 railroad ties or 500 posts, or cutting 15 cords of pulpwood, fuelwood or bolts will be considered as one farm unit.

Farm forestry is an essential part of agriculture, Davis says, and the harvesting of wood crops is particularly important because of the shortage of lumber for both industrial and farm use. Farmers who were wondering what to do with hired hands during the recent winter months will do well to look to the woodland to keep these hands busy next winter. Mature trees should be harvested for lumber, and defective trees and topwood worked in to fuelwood to prepare for a probable fuel shortage.

(1:15) All farmers who slaughter meat to sell are being urged to get slaughter permits right away. The permit is required after midnight March 31, 1943, so better get your permit promptly in order to avoid any difficulties later.

If you slaughter animals for home use only you don't need a permit, but you do need a permit for all the meat you sell. You can get the permits at your local county USDA War Board.

Every wholesale cut of meat, delivered after March 31, whether in the entire carcass or detached from it, must be stamped at least once. This identification will be the permit number assigned to



you under the federal, state, county, or city inspection requirements. It must be conspicuously stamped or stenciled on the meat with acceptable branding fluid, or marked thereon with an indelible pencil.

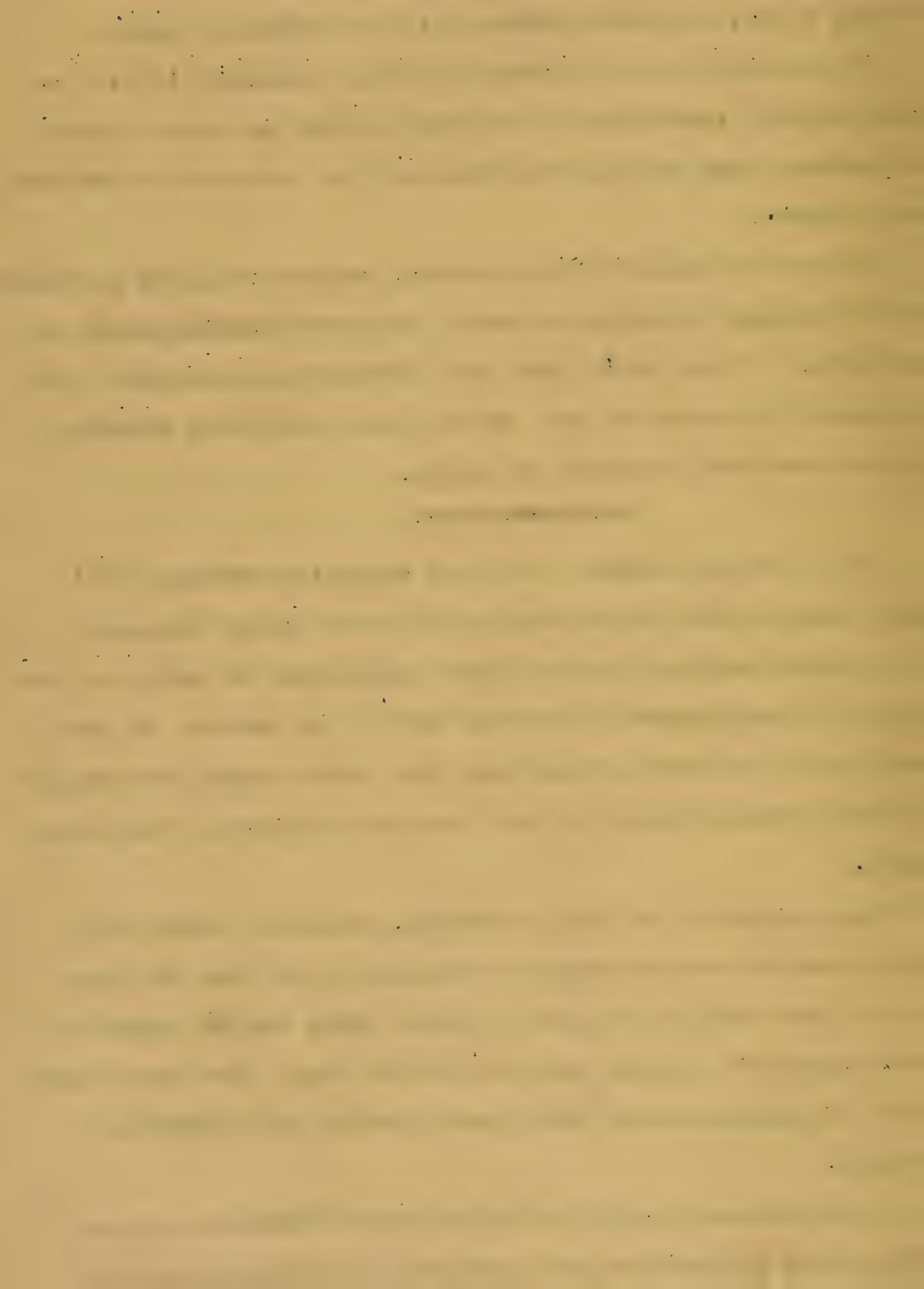
If you sell the meat directly to the consumer, it will be considered properly identified if you tag it with the permit number. In a veal carcass with the skin on, you must put the mark on the hind shanks and brisket.

In order to qualify for a permit, you are required to report the number of animals slaughtered during the corresponding month or quarter of 1941. If you don't have this information available, you will be allowed 300 pounds of meat or the meat from three animals, including not more than one head of cattle.

(1:15) If you farmers have been wondering whether you'll have to use some of your ration coupons in order to get rationed foods for seasonal workmen that you hire temporarily to help you during the planting and harvesting season, here's the answer. If the workmen are hired for work periods less than thirty days, you can get coupons to buy rationed foods to feed them by applying at your local ration board.

When you apply for this allotment, the local board will need this information -- the number of employees you plan to hire, the length of time that you expect to employ them, and the number of persons you expect to feed for the next thirty days. The local board will compute the allotment and issue certificates for additional rationed foods.

If the workmen live in an establishment that you provide for them for seven consecutive days and eat eight or more meals a week, there they are required to turn their ration books over to you.



You are entitled to the coffee and sugar stamps that expire during that period, and eleven points each week of the processed food stamps.

Within five days after the workmen leave, you are required to account for the rationed foods that you have received, and surrender any stamps that you have received from the employees' books to your local ration board. If you have any of the workmen's ration books, they too must be returned within the five days.

CLOSING ANNOUNCEMENT: (:10) And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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TWENTY-NINTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Breaking time: 8 minutes

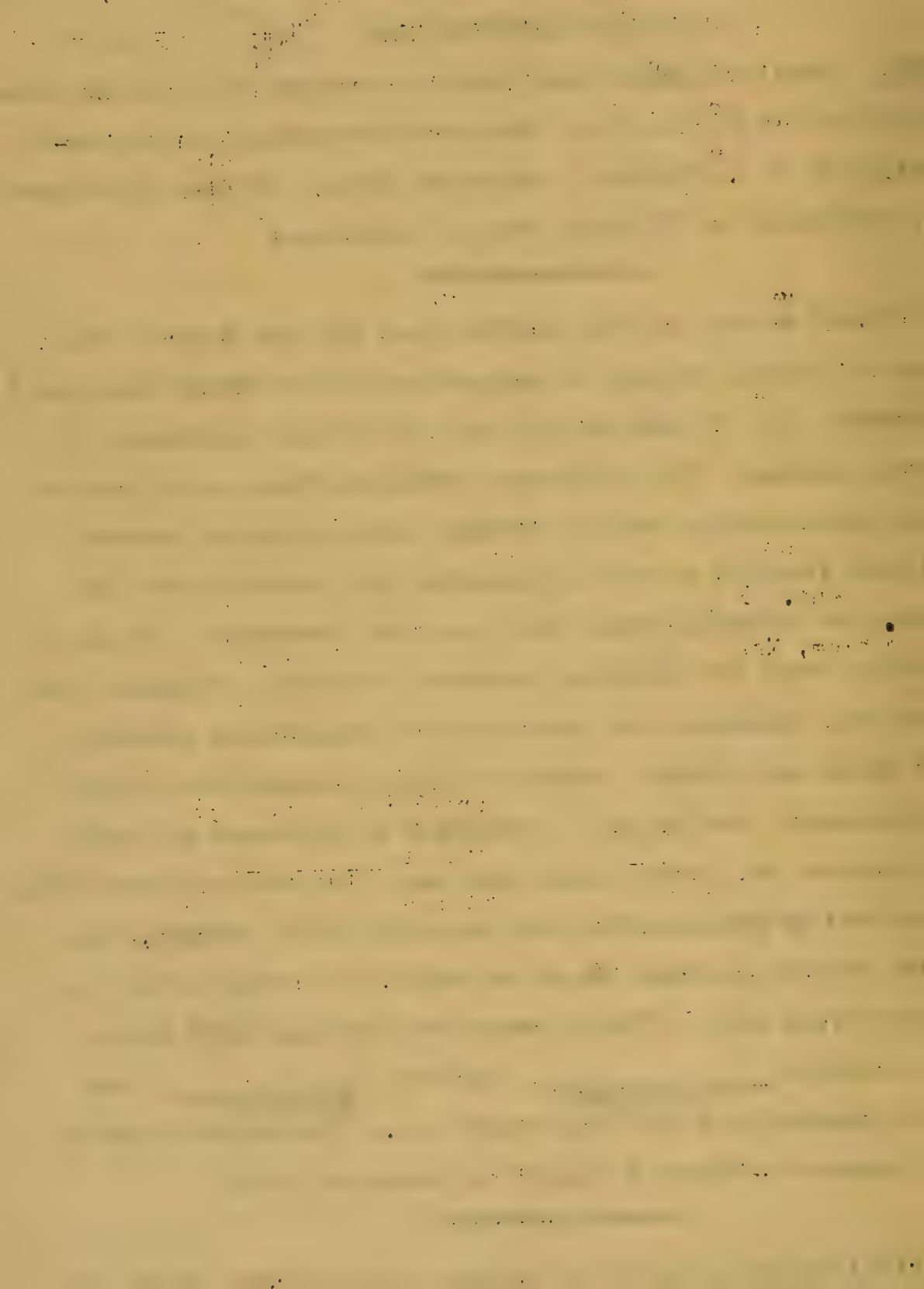
THE LIBRARY April 12, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois, Urbana, Illinois.)

(1:00) We have another leaflet just off the press at the University of Illinois College of Agriculture called "Dairy Pastures," circular number 553. It was written by W. B. Nevens, professor of dairy cattle feeding. This eight-page circular offers specific suggestions on supplementing regular pastures with emergency pasture crops and barn feeding, as well as managing the pasture better and thus avoiding or reducing losses from low milk production. It lists seven suitable crops for emergency pastures, includes a rotation plan for pasture use, discusses the prevention of prussic-acid poisoning from Sudan grass and offers a number of helpful suggestions on good pasture management. Now low milk production in midsummer and early fall is a problem, Mr. Nevens says, that many dairymen face every year. It can be solved by supplementing and improving dairy pastures, and in this time of food shortage should be solved. We suggest that you write for your free copy of "Dairy Pastures" (circular 553) today. Just drop a card to _____, care of _____, and I'll see you receive your free copy right away. You may call for it by name or number-----"Dairy Pastures" or circular 5-5-3.

(:45) We have a word for you now on the villain of the victory garden, alias the cutworm, alias the tomato and cabbage plant

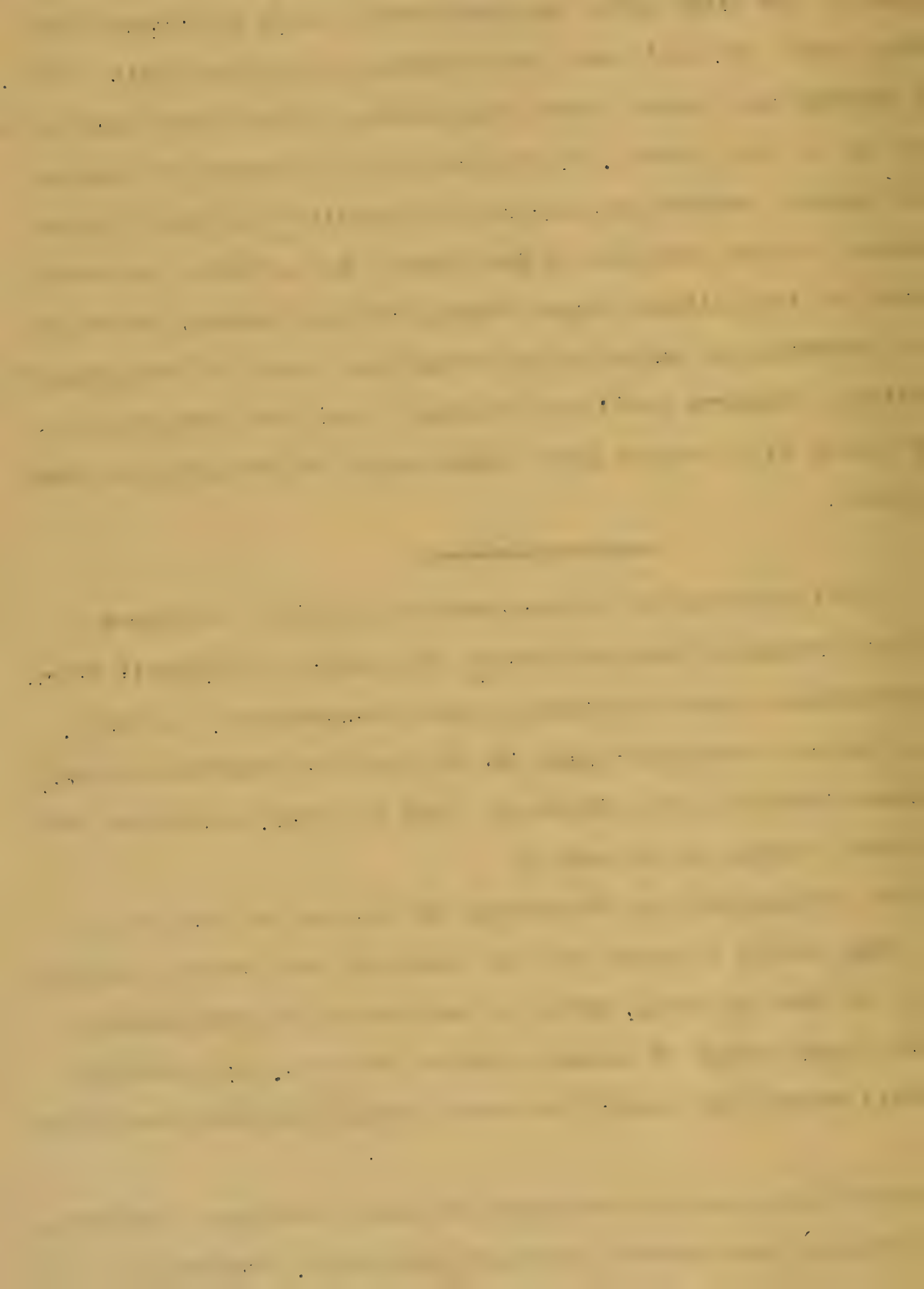


saboteur. One lonely cutworm may cut off as many as six plants in one evening. After the damage is done, he'll crawl into the ground to keep out of the light until the next evening when he'll come back for another raid. So let's keep the cutworm in mind when we're setting out cabbage and tomato plants this spring. That's the time cutworms are out in full force. If you have quite a number of plants, follow the control methods as outlined in circular 522, the Illinois Garden Guide. If you have just a few plants, H. B. Petty, extension entomologist of the Illinois State Natural History Survey, tells us to place a cardboard or paper collar around the plants at the time of transplanting. Cutworms won't chew through that. And the paper or cardboard collar will protect your plants until the danger from cutworms is gone.

(1:00) Speaking of victory gardens, here's a note from V. W. Kelley, extension horticulturist, University of Illinois College of Agriculture, about including a few strawberries. In fact, they can be given a prominent place in the farm and suburban victory garden because they're a real delicacy, easy to grow, nutritious and one of the best sources of vitamin C.

Set strawberries in the spring as soon as the soil can be prepared. Rows should be about two and one-half feet apart if cultivation is to be done by hand, three to four feet if by horse-drawn tools---with plants about 18 inches apart in the row. In planting, press the soil around the plant, the crown being level with the ground surface.

Select high quality varieties for home plantings. Dorsett, airfax and Premier are suitable standard varieties. Maytime is promising as an early berry and Redstar as a late one. The Rockhill (sometimes called Wayzata) is a good everbearing variety.



Annual bearing varieties must not be allowed to fruit the first year, so a good stand of runner plants will be obtained.

The strawberry is a shallow-rooted plant and will not grow satisfactorily unless it is cultivated frequently to control weeds and keep the soil in good tilth.

(1:00) Here's a note from E. L. Sauer, project supervisor of the United States Soil Conservation Service, on results of contour farming.

Based on farm account records kept by 51 Illinois farmers this past year, in cooperation with the College of Agriculture, corn yields were increased an average of more than nine bushels an acre by contour planting and cultivating.

Now in order to meet the 1943 agricultural production goals, approximately three million acres of corn will be planted on sloping land in Illinois. Based on yield increases from contouring in 1942, the planting of this three million acres on the contour would increase our feed production by 27 million bushels, Sauer says. That's about per cent more total corn from all land planted to corn.

Likewise, the total production of soybeans might be increased about five million bushels.

Contour farming hasn't added to the cost of operating land. It uses less power and there's less wear and tear on machinery than farming up and down the hills.

Farm account records show that farmers operating rolling land can contribute most to increased production and obtain the most profitable returns by farming all of their sloping crop land on the contour.

(1:15) With the coming of spring, the termite control swindler will come from his winter hibernation to prey on anybody who gives him half a chance, says B. G. Berger of the Illinois Natural History Survey. It is at this time of the year when the primary royal cast of termites swarm in large numbers from their burrows. It is also, oftentimes, the first indication the householder has that termites are present. In their haste to have the termites controlled, many homeowners will sign up with the first company professing to be termite experts.

Berger advises people who find their houses infested to investigate the termite control company concerned. This can be done by contacting the Better Business Bureau of the Chamber of Commerce at the home office of the termite control company. He also advises the use of competitive bidding. Obtain at least two bids on your termite control job. No one should have his house treated for termites until he has read at least one government publication on the subject of termites and their control. I'd suggest circular 37 entitled "Outwitting Termites in Illinois." If you'd like a free copy of this publication on termites, just drop me a card here at _____ and I'll see you receive your copy right away. Call for it by name or number----- "Outwitting Termites in Illinois," circular 3-7.

(1:15) This year, we need all the eggs we can possibly get. And poultry specialists remind us that one way we can get more and better eggs is to take better care of the eggs we do get. They estimate that each year we lose about 5 per cent of our total egg crop due to spoilage. So they offer a few tips on how to cut down that loss.

First, gather the eggs in a wire basket or a large bucket with holes in it. In these well-ventilated containers, the air can

circulate around the eggs as you gather them. Prompt cooling keeps the eggs in good condition.

When you finish gathering the eggs keep them in the same air-conditioned containers until they are thoroughly cooled before you case them.

If you keep the eggs any time, find a cool place to store them. State and federal research men found a loss of 78 cents a case on eggs held at room temperature for two days. A similar lot of eggs kept under refrigeration showed no loss.

Another test -- on a large farm -- showed about 95 per cent of the eggs stored in a burlap curtain cooler graded "extras." Around 90 per cent of those in an egg cellar graded extras. But only 63 per cent of those stored in a room with no cooling graded extra.

At this time of the year, when the weather is so changeable, it is especially important to cool eggs promptly and keep them cool. Remember any saving of eggs counts in the over-all supply of eggs for our folks at home and for our boys and their friends abroad.

(1:30) So important does the government consider beekeeping in wartime that it included beekeeping among the essential types of farming.

It's not just that we need honey and beeswax. The big reason for this encouragement to beekeeping is that we need bees to pollinate alfalfa, clovers and other crops to help set of seed. We need the legumes produced from this seed to keep up the fertility of the soil and to feed our huge herds of livestock.

Under selective service regulations, a beekeeper should have about 400 colonies of bees, which amounts to the 16 war units required for deferment of one worker. If he has fewer than 400 colonies of bees, he might fill out his 16 war units for deferment with chickens, dairy

cows or some other essential farm product. Of course, along with his beekeeping, a man would have time in the slack season to do gardening or carpentry work -- or even to take a job in a war plant during the winter.

Another way to meet this problem of labor in the beekeeping is to draw on the help of women and children. You can't turn large apiaries (or a large number of colonies) over to beginners to handle on their own. It takes years of experience to master beekeeping. But even a man working full-time in a war plant can supervise women and children in a lot of the work around the hives, in raising queens, in handling package bees and in work in the honey house.

However you manage it, try to keep your bees working throughout the war. It's not just the honey and beeswax we need. Remember that the bees help produce the legume seed for crops to keep up the fertility of our soils for important war crops and to feed our flocks and herds to meet goals for milk, butter, eggs and meat.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
(U. S. Department of Agriculture --

Speaking time: 6 minutes

April 15, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCERS: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

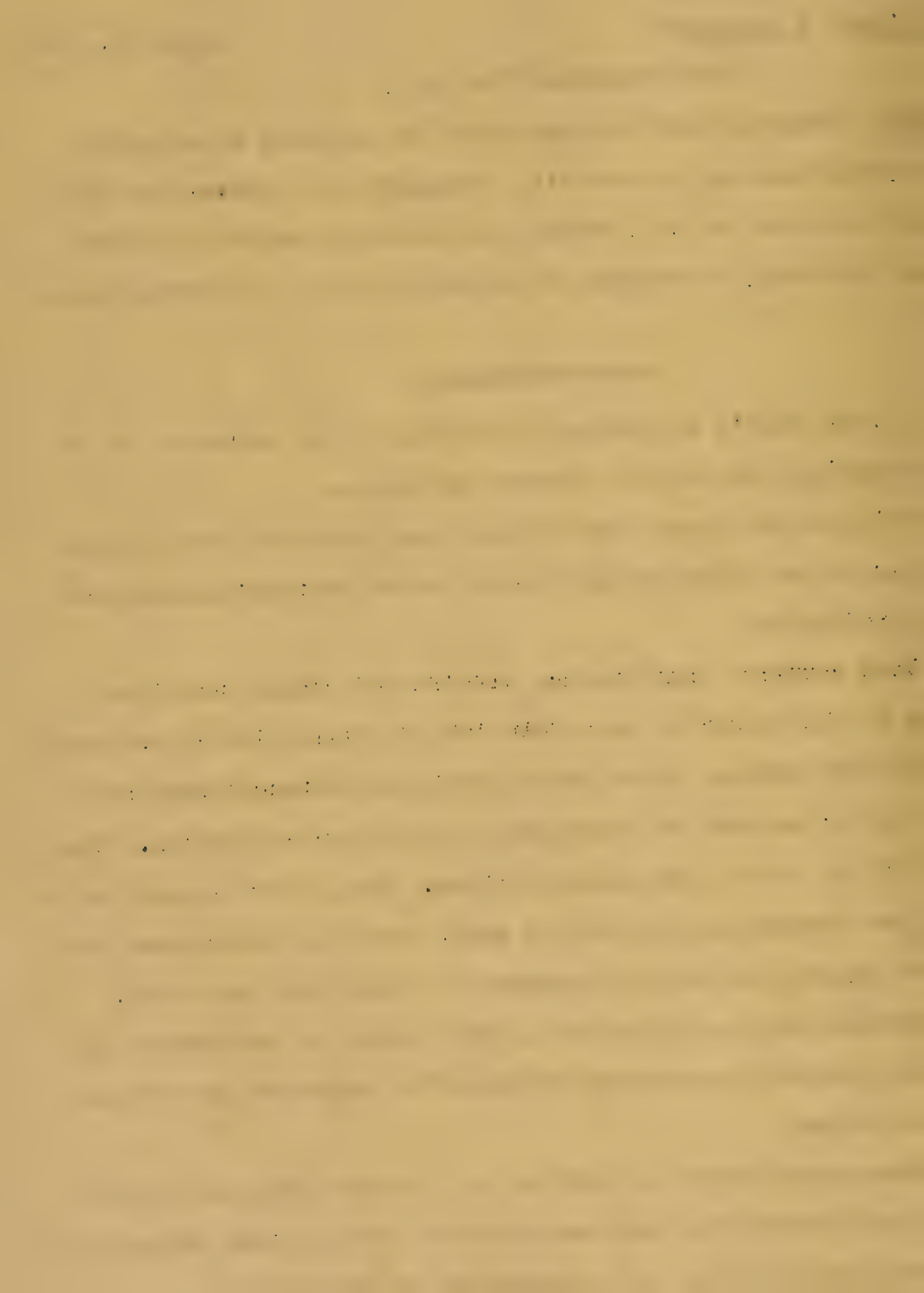
(1:35) Here's a problem in keeping up our soils -- and in growing enough feed for our big flocks and herds.

It's to get honey bees located near fields of alfalfa and clover, so as to get high yields of seed -- and so maintain alfalfa and clover production.

Some counties that produce alfalfa and clover seed have enough bees in the county to do a fair job of pollinating if the bees were in the right place. Under exceptional circumstances bees have been known to fly as much as eight miles for nectar and pollen. They ordinarily fly up to one and one-half miles. But, to do a good job of pollinating or produce a good crop of seed, the bees need a home base within a few hundred yards to a quarter of a mile from the field.

Getting the bee hives set up that close to the alfalfa and clover fields requires cooperation between the beekeeper and the man who owns the fields.

Beekeepers recognize that it is to their advantage to have their bees near fields of clover and alfalfa. At the same time, there are practical limits to how far a beekeeper can travel back and forth to look after his bees.



The man who owns the clover and alfalfa can help out by providing a well protected and easily accessible location for the bee colonies, a location where he can keep an eye on the hives and guard against thieves stealing the honey. The man who has the crops that need pollinating can also let the owner know when the bees are swarming -- and, maybe, even do some of the simpler jobs such as putting on and taking off winter packing.

With that kind of cooperation, the beekeeper can cut down trips to look after his bees, and the man who grows alfalfa and clover seed can get a better job of pollination for his crops and so get higher yields of seed.

The state bee inspector, your farm adviser or war board can tell legume seed growers about beekeepers who might put colonies of bees near their fields.

(1:15) An important part of any good poultry house is the floor, says L. E. Card, chief of the poultry division, University of Illinois College of Agriculture. He points out that mistakes made in floor construction are difficult and expensive to correct. So let's take a look at what goes into making a good poultry house floor and build it right the first time.

Naturally, we want a floor that's dry, easily cleaned and one that won't be too cold in winter. For a permanent poultry house, a concrete floor best fits these specifications. It can be cleaned and scrubbed when necessary, and although it is cold to the touch, it actually will be warmer in winter than a board floor which responds quickly to changes in air temperature. But not all concrete floors are dry, and there is usually a good reason, if it can be found.

If at all possible, choose a location or site for the house which is slightly higher than the surrounding ground, so that soil water and surface water will tend to drain away from the house rather than toward it. Then plan to build the floor over a layer of crushed rock, or gravel or hollow tile, in order to insulate it well from the ground beneath. Let's not make the mistake of digging out an excavation below grade for the crushed rock or gravel, Dr. Card says. There likely will be a pool of water under the floor in wet weather and the floor will be damp in spite of any methods of good management. Instead, build all the floor, including the sub-floor of rock or tile, above grade, and be on the safe side as far as ground water is concerned.

(:45) The government has taken two steps to make it easier for farmers to keep their rubber-tired tractors "well shod."

First, the Office of Price Administration has taken tractor tires out from under truck tire quotas. That means it will be easier for farmers to get tractor tires this year than it was a year ago. If one locality runs out of tractor tires, it can get more from reserves that have been set up.

Of course, a tractor owner can not get a new tire as long as the old one can be re-capped. But the OPA has lifted all restrictions on tractor tire re-caps made from reclaimed rubber. A farmer can now get a re-cap for his tractor without a rationing certificate.

Rubber tires enable farmers to operate their tractors at peak efficiency. Agricultural engineers say rubber tires speed up field work, save 15 to 25 per cent on gas, reduce wear and tear on tractors and make it far easier to move tractors from place to place.

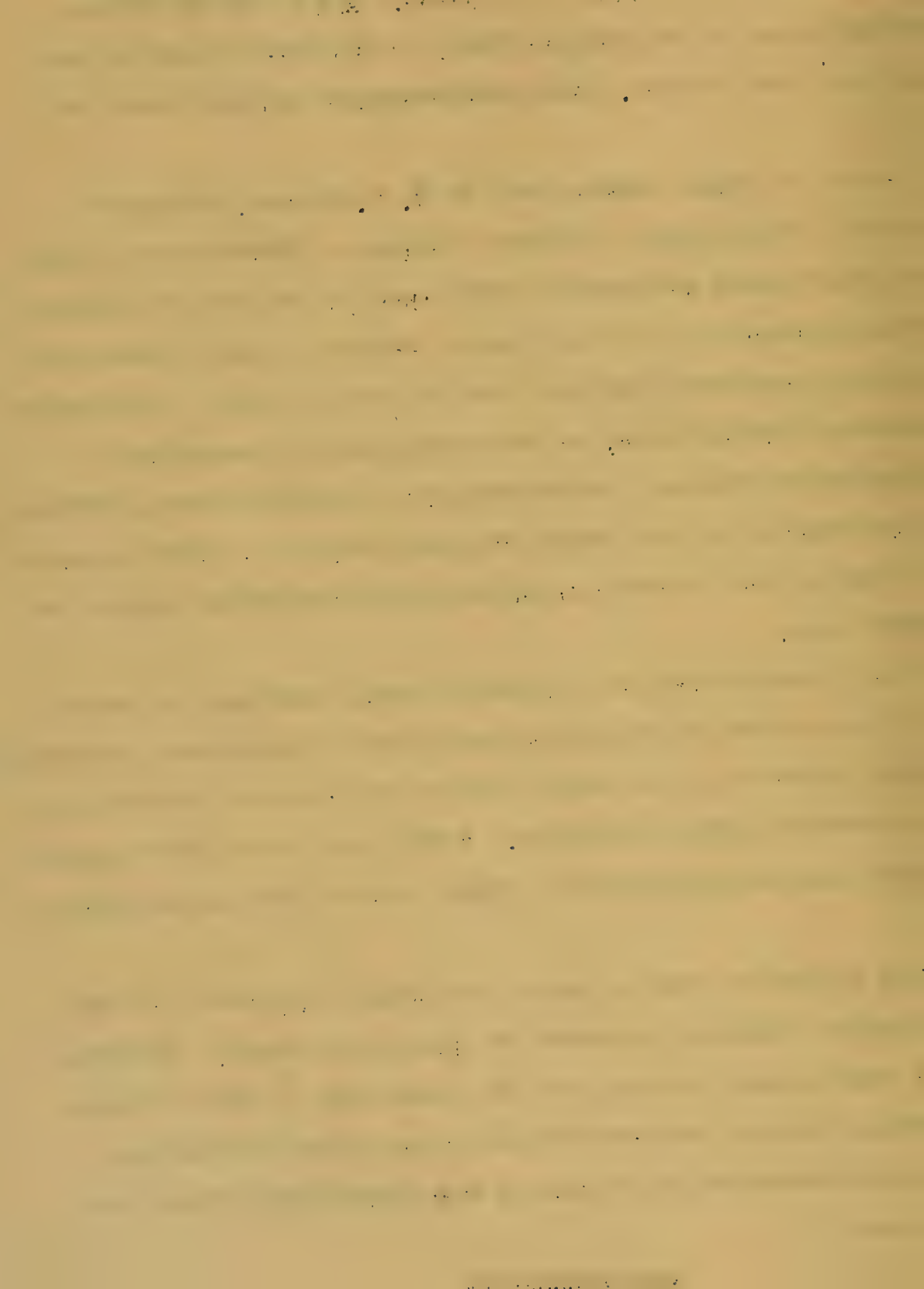
(:25) Now that spring plowing and planting time is here, let's resolve never to drive your tractor forward or backward while we're

standing on the ground. Resolve never to lean over or climb around to make adjustments while driving the tractor. And if we use horses, let's resolve never to get down in front of the plow or harrow when the horses are free to move. Save farm manpower and help beat the Axis.

(1:00) A recent survey made by V. W. Kelley, Extension Horticulturist, University of Illinois College of Agriculture indicates that fruit trees are found on more than 95 per cent of Illinois farms in the northern half of the state. However, many of these farm orchards have a run-down appearance due to lack of vigor. This defect can be corrected, Kelley says, by the application of manure and a moderate degree of pruning. Manure should be applied at once, spreading it on the surface of the ground from the trunk to a point somewhat beyond the ends of the branches in about double the amount spread for general farm crops.

Vary pruning with the different species and ages of trees. Prune older apple trees moderately by sawing out watersprouts, removing weak drooping laterals in the lower third of the tree and thinning out the head by removing lateral branches. Prune young apple trees lightly and pears and cherries very little. Prune peaches more severely than apples.

Use a file or rasp to scrape the rough flaky bark off the trunks and larger framework branches of older apple trees. The point of the file can be used to clean out the rough bark in the crotches. The trees should also be sprayed several times during the season. This will yield dividends and be like a sign proclaiming "This is a Victory Orchard."



(1:00) Here's an item from J. E. Davis, Extension Forester, University of Illinois, College of Agriculture, and State Natural History Survey stating that effective April 23, runaway price advances for logs and bolts will be halted. All sizes, grades, and species of softwood and hardwood logs are covered in this regulation by the OPA which sets log prices at the September, October 1942 level. However, the order does not cover fuelwood, pulpwood, posts, piling, and piles, or other wood products covered by previous orders nor does it affect sales of standing trees. Davis believes this order will help to increase lumber production by keeping prices of logs in line with the price which has been set for a long time on manufactured lumber. Chances for ruinous competitive bidding for logs will be reduced, and mills which have been "squeezed" into low production because of high operating costs will be in a better position to bargain for badly needed log supplies. Since the ceiling prices established by each log buyer must be posted, woodland owners will be able to learn about local log values and the order should serve to protect them from the common practice of lump sum buying.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois, College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

THIRTY-FIRST
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture

Speaking time: 5:40 minutes

April 19, 1943

(FOR BROADCAST USE ONLY)

ANNOUNCERS: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.

(:20) The Future Farmers of America will hold their annual meeting on the campus of the University of Illinois College of Agriculture April 23 and 24. Following the regular business sessions beginning at 9 o'clock, honorary state farmers will be nominated. The public speaking contest will be held on Friday evening followed by the presentation of trophies and medals for swimming, horse shoe pitching and efficient milk production. The meeting will conclude on Saturday noon with the election and installation of officers.

(:35) Be sure to circle May 6 on your calendar for that auction sale of Hereford cattle at the Dixon Springs Experiment Station. You remember I mentioned that some time ago. The University of Illinois College of Agriculture will offer 33 head of Hereford cattle for sale. If you're worrying about gasoline to take you and your car there and back, here's something to keep in mind. Get supplemental gasoline for traveling to cattle sales by applying on form OPA No. R-552 to your local ration board. I have a free 15-page catalogue telling all about the sale. If you would like a copy just drop me a card here at _____. Everyone is requested to bring a copy of the catalogue to the sale. Also, bring your lunch. Restaurant facilities are limited. Remember the date, May 6.

(1:10) Some of you folks who are planning to increase your soybean acreage this year may be debating whether to row-plant or drill. Well, row-planting---though it has some disadvantages---will probably yield more beans. Row-plantings require about half as much seed as drilled plantings, the crop does not lodge as badly, the quality of the beans is better and weeds are more easily controlled. Drilled beans are likely to require less labor for cultivation, but cultivating must be done at just the right time if weeds are to be controlled. Crop specialists of the University of Illinois College of Agriculture say that beans planted in rows 24 to 28 inches apart will probably yield best. The machinery available for planting and cultivating will determine the width of row. When corn-cultivating machinery is used, beans should be planted in rows wide enough to permit the use of this machinery with a minimum loss of time in adjustment and operation. If beans are planted in wider rows (36 or 40 inches) and the same amount of seed is used for each acre, yields will not be reduced much. The amount of seed needed for each acre depends on whether the crop is planted in rows or drilled and to a certain extent on the variety. On good land standard varieties such as Dunfield, Illini and Manchua are usually seeded at the rate of about one bushel an acre in row plantings and two bushels in drilled plantings.

(:45) Now you fellows who are planning on a record-breaking crop of soybeans this year will want to check the germination of your seed. That suggestion comes to us from J. C. Hackleman, professor of crops extension, University of Illinois College of Agriculture. This soybean situation isn't at all rosy when it comes to quality. So check on your seed supply and the germination right away. Hackleman says a number of samples were tested for germination at the university

this past winter which ranged all the way from 8 to 97 per cent germination. A mimeograph list of farmers whose soybeans tested 80 per cent or better has been prepared showing the moisture content, germination, number of bushels and variety, as well as the name and address of those whose seed was tested. If you're having difficulty in locating seed of good quality for your 1943 seeding of soybeans, I'd suggest you write for this list. It's free for the asking. Just drop me a card here at _____ and ask for the soybean tests.

(:30) On Thursday evening of this week, April 22, there's a hemp meeting scheduled at Ladd, Illinois. It will be held in the parrish house beginning at 7:30. J. C. Hackleman, professor of crops extension and C. M. Linsley, assistant professor of soils extension, University of Illinois College of Agriculture, will be there to assist with the meeting. They have a new movie to show on hemp growing, they'll discuss the adaptation of soils to hemp growing, cultural practices and seeding methods. They'll have some samples of hemp grades, too. So hemp growers in the Bureau county area remember that meeting at Ladd, Illinois, Thursday of this week beginning at 7:30 p.m.

(:25) Farm Security Administration borrowers in this state are playing a part in the wartime production program of the University of Illinois College of Agriculture. For example, John Stephenson of Marshall county, who produced 1,500 pounds of pork in 1941 and 6,700 a year ago, plans to market 12,500 pounds in 1943. Then, too, Mrs. Mary Cushing, a widow of Will county, whose farm produced 1,100 pounds of beef a year ago, plans to market 2,800 pounds of beef this year.

(1:00) Here's a note from B. G. Berger, assistant entomologist, Illinois State Natural History Survey, about the proper way to treat

for control of termites. It follows the 1-2-3-3 $\frac{1}{2}$ principles of the National Pest Control Association. These principles were set up by the pest control operators with the cooperation of federal, state and university specialists.

Number one represents the application of a soil poison around all outside fixtures and foundation walls of a house.

Number two represents the void treatment if a void is present in the foundation wall.

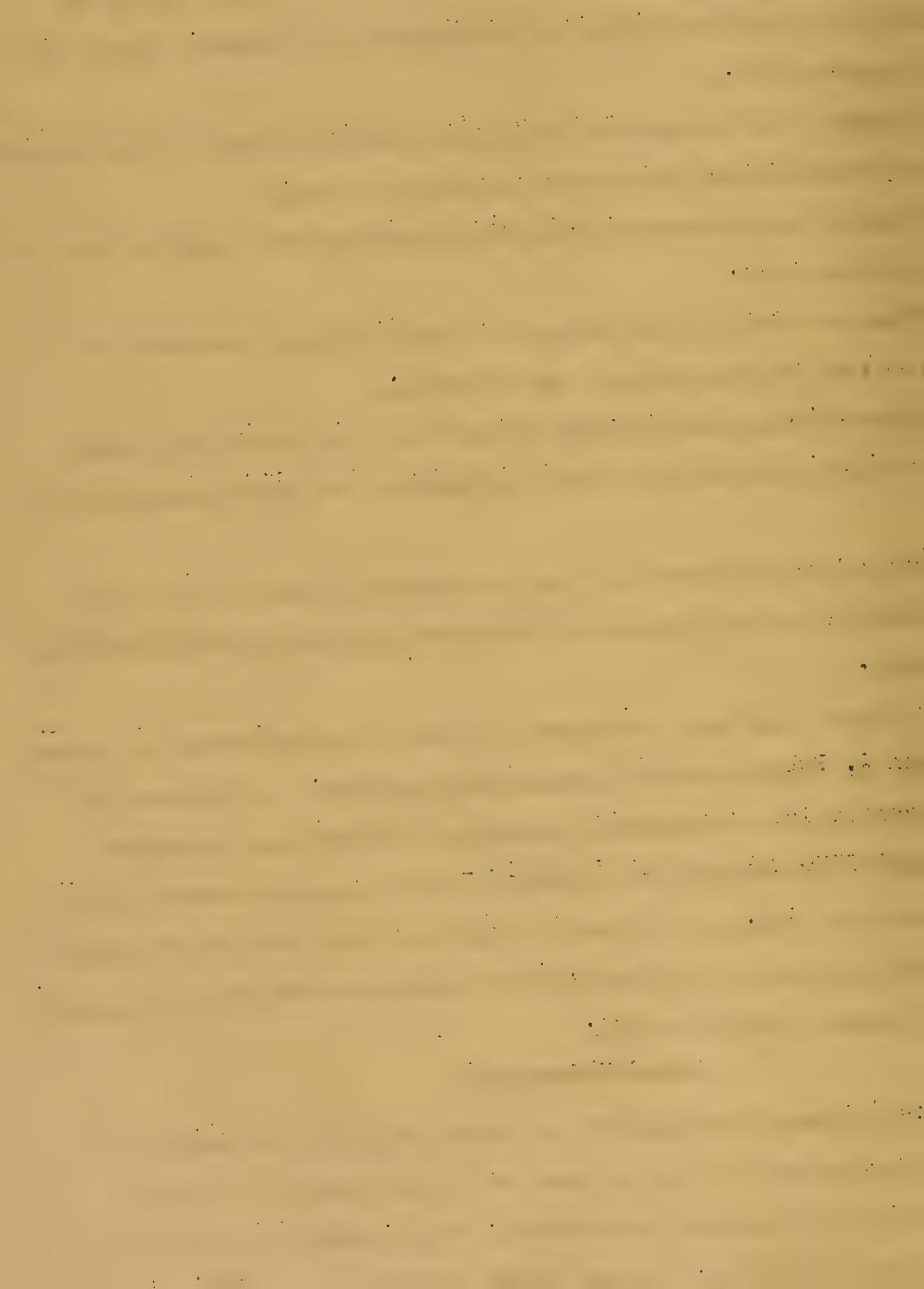
Number three is the basement floor treatment wherever there is a possibility for the entrance of termites.

Number three and one-half stands for wood treatment where the wood is high in moisture content or subject to termite and fungus damage.

Berger also points out that in termite control, as in all other businesses, we must watch out for those who would take advantage of our honesty.

He also says that it's easy for this type of people to operate when John Q. Public doesn't understand termites. He advises all people who contemplate controlling termites to first read circular No. 37 - OUTWITTING TERMITES IN ILLINOIS - and then have several companies bid for the job. If you would like your free copy of circular 37 on outwitting termites in Illinois, just drop me a card here at _____. Remember the number, circular 3-7.

(:45) Farmers who didn't get their limestone delivered in time to apply ahead of oats and clover are asking where it can be applied when it is delivered this spring. Well, here's a suggestion that comes to us from C. M. Linsley, soils extension specialist, University of Illinois College of Agriculture. He says one of the best



places to apply limestone is on land to be planted to corn or soybeans where small grains and clover are to be seeded next year. Limestone works slowly and this allows about a year for the limestone to correct the acidity. Another advantage is that the cultivation of corn and beans also mixes the limestone thoroughly with the surface soil. Still another place to apply limestone is on permanent pastures where clovers are to be seeded in a pasture improvement program. The soil should, of course, be tested to find out how much limestone is needed to correct the acidity.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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H C N CASE
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THIRTY-SECOND
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 6 minutes

April 22, 1943

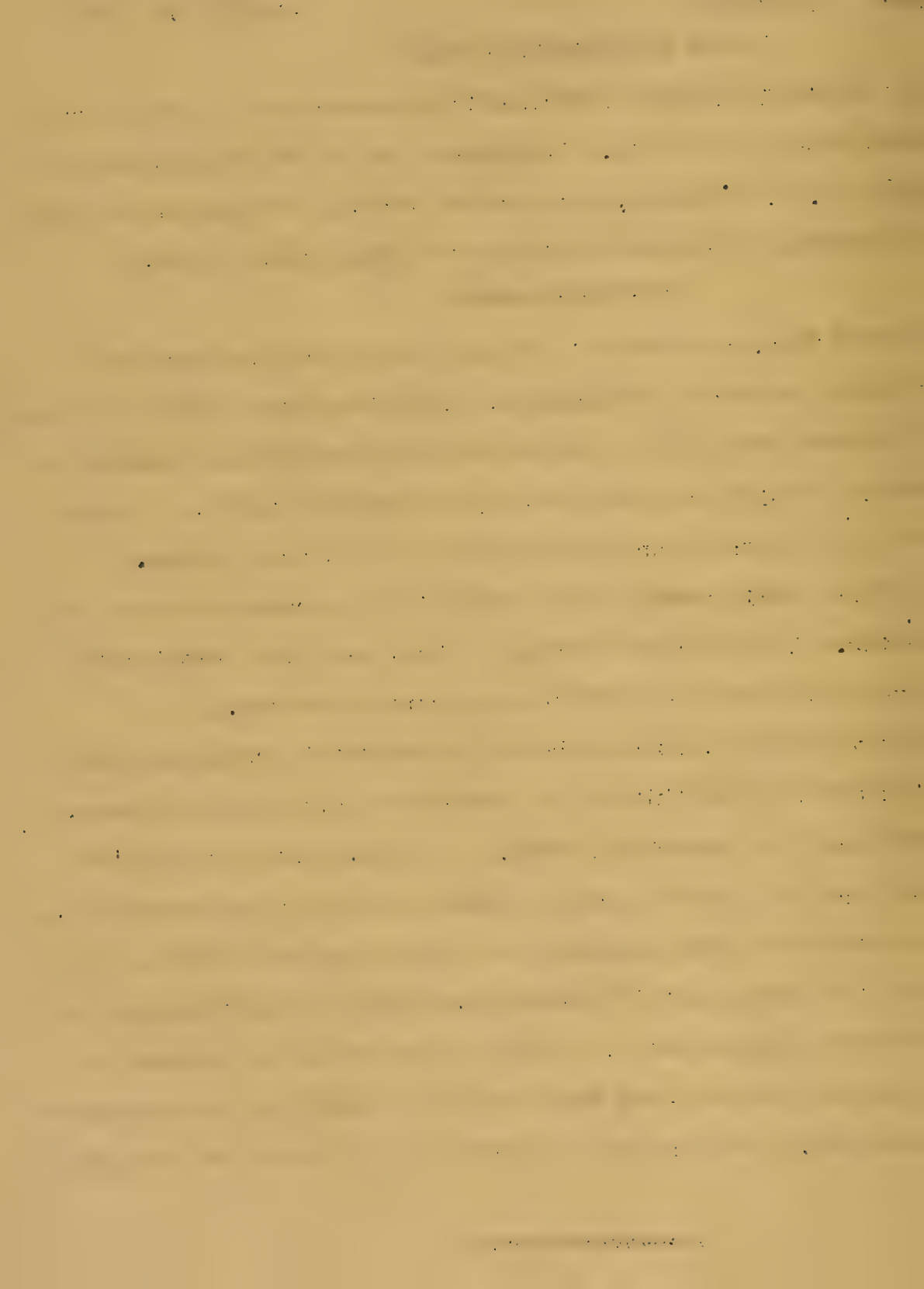
(FOR BROADCAST USE ONLY)

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(1:00) First, a word of caution for you victory gardeners from H. B. Petty, extension entomologist, Illinois State Natural History Survey. It's about when not to use an arsenate for killing insects on your vegetables, or---if you must use one, always be careful. Beans should not be dusted with an arsenate after the pods are forming. Cauliflower and broccoli must not be dusted with an arsenate after the heads are forming. Do not dust cabbage in the last four weeks before harvest. If you do, peel the outer leaves pretty far back.

Leafy vegetables, such as beet greens or spinach, must not be treated with an arsenate thirty or thirty-five days before harvest. Even then they must be thoroughly washed. You see, most of us won't be able to get our old standby garden insecticide this year---rotenone. So a lot of us will be using arsenate of lead to control insects. If we'll just keep in mind that it's poisonous, apply a light covering of it (not in clumps) when we use it, apply it far enough in advance of the time we harvest our crop and then wash the vegetables thoroughly---we'll be fairly safe. Keep an eye on your arsenate dusts and use them wisely.

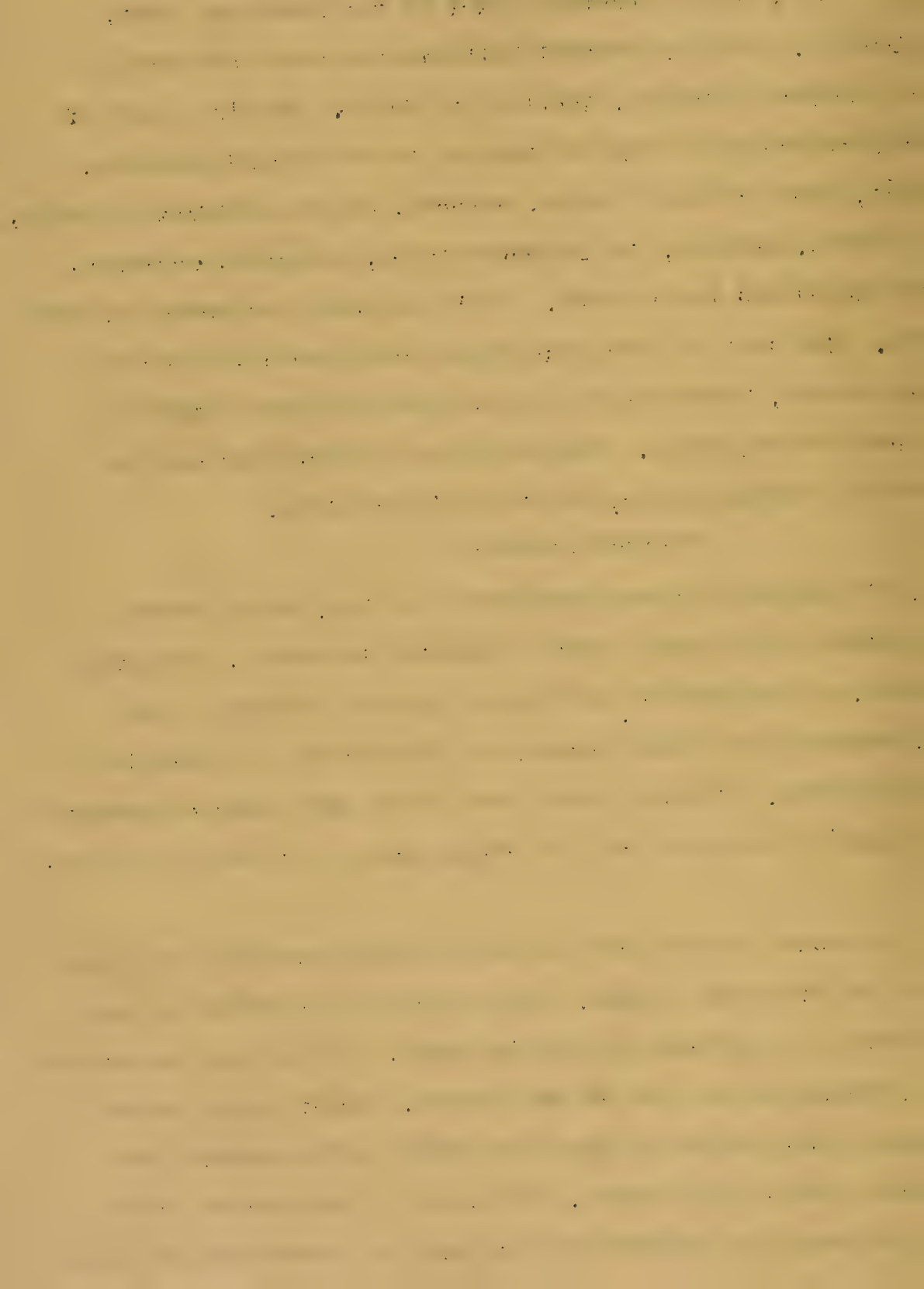
(:45) Here's a note from B. L. Weaver, associate in vegetable crops, University of Illinois College of Agriculture, reminding us that



it's now time for our second planting in the victory garden. Of course, the recommended dates for the southern part of the state are past, March 25 to April 5. But for central Illinois the dates are April 10 to 20 and for northern Illinois, April 25 to May 5. Here's a list of some of the vegetables we'll want to include in our second planting. Beets, broccoli, early cabbage plants, carrots, early cauliflower plants, head lettuce plants, parsley, New Zealand spinach, parsnips, radishes, balsify, Swiss chard and tomato seed. Let's not rush the season on snap beans and corn. Now just in case your ground was plowed late or the weatherman was unkind, Weaver says we still have the green light on planting the cool-season crops. They might not do quite as well as they would have if planted early, but it isn't too late.

(1:10) Time may not mean anything to a hog, but it means everything in winning this war. Fast production is needed. And when it comes to pigs, we can produce more rapid gains on pasture, says Damon Catron, associate in animal husbandry, University of Illinois College of Agriculture. Feeding trials have shown that pigs on pasture are ready for market from three to five weeks ahead of those fed in dry-lot.

Some fall-sown grains such as rye or wheat will fill the bill until the first to fifteenth of May. Hogs then could be moved to oats and could be placed on a mixture of oats and rape. If the rape was seeded rather heavily, it might serve most of the season. Sweet clover seeded with oats is ready for pasture in about two months after seeding and usually lasts the rest of the season. The same is true for the Haas mixture, which includes two bushels of oats and two pounds each of sweet clover, red clover, alsike, timothy, rape and lespedeza.

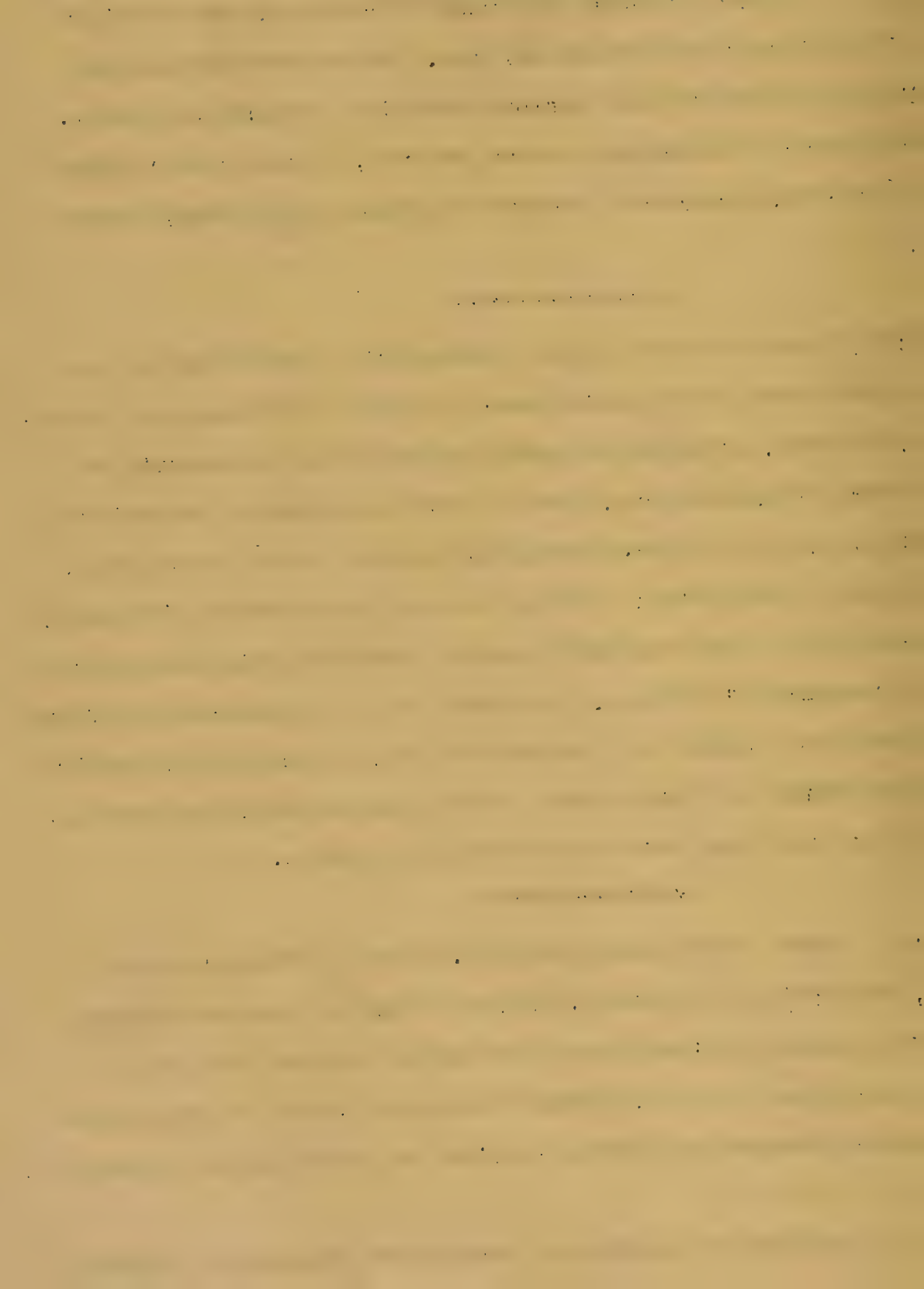


If you can't buy clover seed, oats and Canadian field peas will make a good pasture in about six weeks for central and northern Illinois. It will last for a month or two. Sudan grass seeded the middle of May will provide good pasture from July through September. No matter what kind of emergency pasture we use, Catron says to start planning now for some emergency pasture to produce more pork, cheaper and faster.

(:35) There's considerable evidence that beef bulls of more than average size sire calves which excel in rate and economy of gain, states E. T. Robbins, livestock extension specialist, University of Illinois College of Agriculture. Part of the demonstrated superiority of some bulls as sires of fast-growing calves seems to be associated with greater size at maturity. The cattle with considerable "stretch," as feeder buyers call them, regularly put on pounds in the feedlot more rapidly than "pony-type" feeders. For these reasons, experienced farmers who maintain beef cow herds look for size as well as quality in their sires. Robbins points out that a bull can be big and still be low set smooth, blocky in build and sire market-topping calves.

(:45) I have a note here from Dr. Benjamin Koehler, crop pathologist, University of Illinois College of Agriculture on soybean diseases. While there isn't as much known about soybean diseases as there will be in a year or two, Koehler points out, that in view of the increased acreage forecast for this year, here are some points to keep in mind:

From a sanitation standpoint, continuous cropping to soybeans is certainly not advisable. While seed infection is no doubt of considerable importance in some cases, the indications are that by far the



largest source of infection is in the soil and crop refuse. There are other reasons why soybeans should not follow soybeans, too. With increased acreage of soybeans there has been increased damage from grape colaspis, but only in the second or third year. Corn is a good crop to follow soybeans. For one thing root rot of corn is reduced when the corn comes after soybeans. Corn and soybeans are the big war crops in Illinois and it's better, Dr. Koehler says, that these crops be grown alternately instead of either one being grown continuously.

(1:00) Now you folks who are planning any storage buildings this year will be interested in a two-page leaflet arranged by D. G. Carter, professor of agricultural engineering, University of Illinois College of Agriculture. It contains a description and the price of a number of plans for crop storage buildings including movable grain bins, stationary granaries, corn cribs, farm elevators, hay storage and silos. You know, farm buildings with an estimated cost of less than \$1,000 may be erected without a permit. If salvaged lumber is used, the material and labor involved in using it will not be charged against the cost limit. Of course, you'll need a permit from your county war board in constructing buildings of higher cost.

Now the blueprint plans listed in this leaflet have been designed according to standard practice, and include the usual recommendations for effective storage. Materials other than lumber can be used in the construction if you can't buy lumber. The charge for each blueprint plan is listed with the description in this leaflet. However, there is no charge for the leaflet itself. So if you'd like a free copy, just drop me a card here at _____ in care of _____ and I'll see you receive your free copy right away. You may call for it by name or number, Crop Building Plans, Agricultural Engineering 3-8-5.

(:45) There must be a tight fence around the clean pasture for "sanitation" pigs, says E. T. Robbins, livestock extension specialist, University of Illinois College of Agriculture. Otherwise some of the pigs will get out onto contaminated ground and become unthrifty. Robbins relates an incident on the farm of Forrest Lemons, Woodford county, a number of years ago. One of his pigs found a hole in the fence which the owner and the other pigs didn't find. This pig roamed back repeatedly into old hoglots. In the fall when the other pigs averaged 200 pounds, this runt weighed about 40 pounds. Robbins asserts that after pigs become active, a good fence is the life of the sanitation project. A barbed wire below the woven wire fence and close to the ground is effective in keeping pigs from crawling under. If any pigs get out, the whole line should be inspected and any holes repaired

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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THIRTY-THIRD
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture

Speaking time: 5½ minutes

April 26, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:00) Here's a note on alfalfa from J. C. Hackleman, professor of crops extension University of Illinois College of Agriculture. He says the situation in which we find ourselves now makes it necessary to look somewhere other than the north for Common alfalfa. There's no more seed available from the north, so we must get it from Kansas or Oklahoma. There's a limited supply of Kansas alfalfa that may be obtained, and this alfalfa is perfectly good. We have no hesitation in recommending it for the central portion of the state, and farmers using it in the northern part of the state report excellent results.

The supply of seed that seems most plentiful now and that can be used by Illinois farmers is from Oklahoma. There's some Oklahoma seed which isn't called certified, but Oklahoma-approved. It's field-inspected and carries the tag of the Oklahoma Crop Improvement Association. The Oklahoma seed may possibly have a little less winter resistance, but in trials at the University of Illinois for a period of several years genuine Oklahoma alfalfa has compared favorably with seed from Kansas and the northwest.

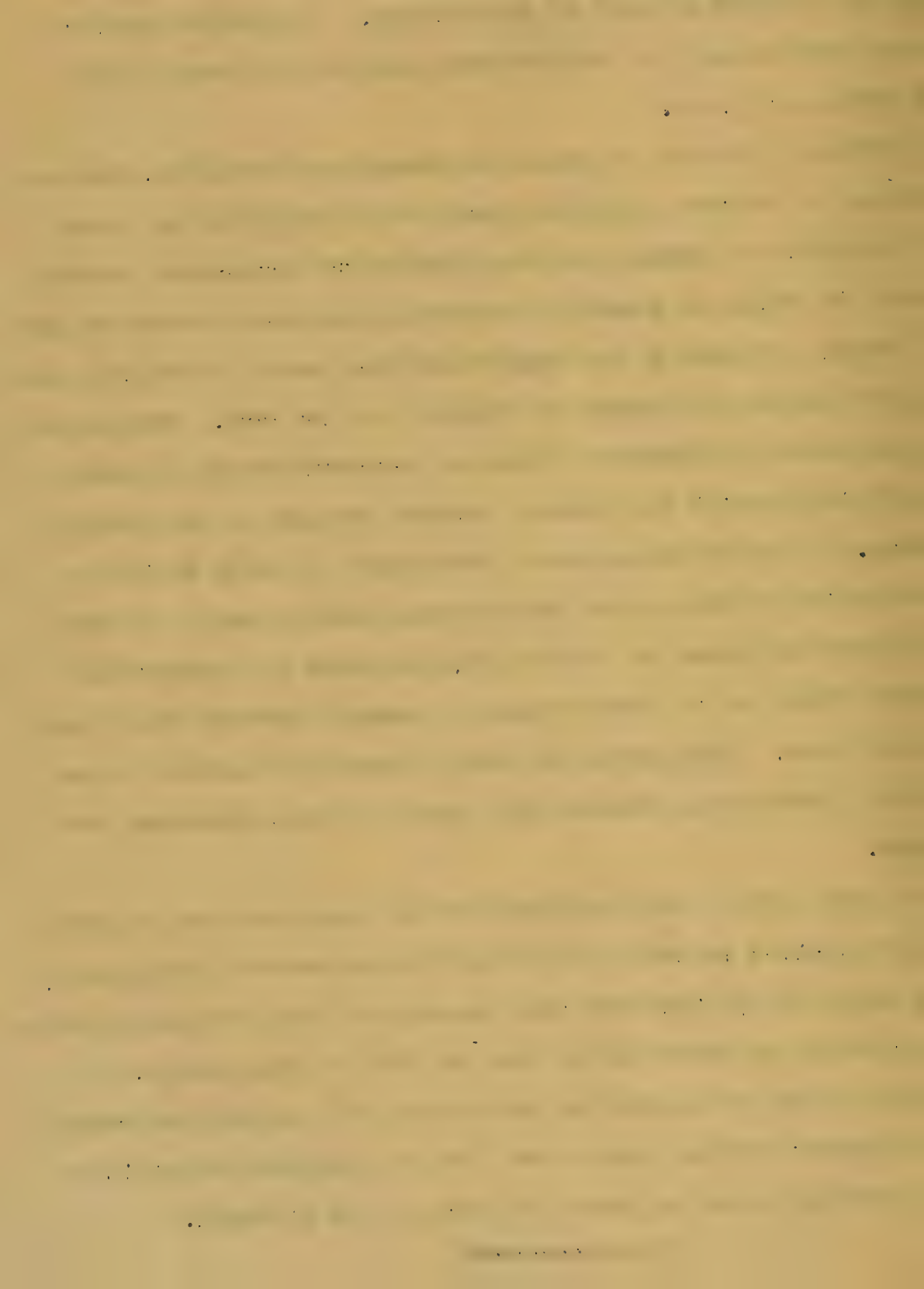
(1:30) No farmer would think of buying two or three hundred dollars worth of commercial fertilizer and letting it stand unused for

a year, says C. M. Linsley, assistant professor of soils extension, University of Illinois College of Agriculture. But that's exactly what happens when manure is left to waste away in the barn, shed or open pile until next year.

Saving fertility in manure is always good business, but now during the war it is more important than ever to save and use every pound of fertility to produce the food that is so desperately needed. Farmers know the value of manure in producing increased yields of corn and other crops, but many do not appreciate the loss of fertility that may take place before the manure is returned to the land. Manure is a valuable by-product of livestock farms--a by-product which if saved and used efficiently will add several hundred dollars to the profits of many farms. A ton of the average farm manure is worth \$3 in increased production of grain, hay and pasture, Linsley says. At war-time farm prices the value of a ton of manure would be considerably higher. Many farms run 100 tons or more of manure through their barns and sheds each year. This amount of manure carefully handled to reduce fertility losses will produce \$300 worth of corn, soybeans, small grain and hay.

A large part of the fertility in the manure is easily lost. One hundred tons piled in the open exposed to the weather for several months will shrink to 50 tons and lose one-half of its fertilizer value. The loss represents an actual money loss of \$150 in crop yields. The important thing is to get manure on the land where the soil and crops will get the benefit of the plant food. It is important to get it on as soon as possible before it loses too much of its strength.

(:45) Most gilts for breeding purposes are selected from the spring pig crop. They have their first litters the next spring when



they are about 12 months of age. There's an increasing tendency among farmers who raise two litters a year to save breeding gilts from the fall pig crop, states E. T. Robbins, livestock extension specialist, University of Illinois College of Agriculture. For example, on the LaSalle county livestock tour this spring, Chester Heckathorn showed the visitors 12 sows which were raising 110 lusty February pigs from their second litters. He explained they produced their first litters last fall at 12 months of age. In this way they had plenty of pasture to contribute to health and thrift during the first pregnancy period. With more age and size during their second pregnancy, they could better stand the less favorable winter conditions. After weaning their second litters, his sows are fattened and sold late in the summer when prices normally are the highest of the year.

(1:00) Here's a report on the sweet clover weevil from M. D. Farrar of the Illinois State Natural History Survey. He says that feeding by the sweet clover weevil on second-year sweet clover in 1943 is not as severe as it was in 1942. Most fields have started slowly, thus permitting the weevils to feed for several weeks on the tips of the new growth. This early damage is quite noticeable as ragged feeding cuts along the margins of new leaves. The plants are now growing rapidly and will soon outgrow much of the injury resulting from this early feeding. Farmers who have satisfactory stands of sweet clover can be reasonably safe in holding these fields for pasture, soil improvement or a seed crop.

Spring-seeded sweet clover is just getting started and has not been injured. Later migrations into these fields may cause some loss of the stand. Planting a mixture of sweet clover, red clover, alsike or alfalfa is a good plan in areas where the weevil has become

abundant. Incidentally the sweet clover weevil is now distributed over the northern two-thirds of Illinois, including most counties north of Effingham county.

(:20) With America facing a serious farm manpower shortage, there'll be many new hands working with plows and pitchforks this year. This means more responsibility for every farmer who has this kind of help. Do your duty by seeing that all volunteer or inexperienced workers are fully acquainted with the safe methods of operating farm machinery and handling livestock.

(:55) Here's another leaflet containing a list of plans for hog production equipment, arranged by D. G. Carter, professor of agricultural engineering, University of Illinois College of Agriculture. You know, the wartime need for increased pork production has resulted in a widespread demand for plans for hog houses, self-feeders and other equipment for efficiently brooding, feeding and handling hogs. And no authorization is required for new or remodeling work up to an estimated cost of \$1,000 a year on agricultural structures. The leaflet lists the numbers of equipment plans, together with circulars, including the Illinois Farm Building Plan Service, labor-saving hog equipment and movable hog houses. There is a special page order blank. If you would like a free copy of this two-page leaflet on hog production equipment plans, just drop me a card, _____, in care of _____ and I'll see that you receive your free copy right away. Call for it by name or number, hog production equipment plans, or leaflet agricultural engineering 3-8-6. *****

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois, College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

THIRTY-FOURTH (From Extension Service in Agriculture
ILLINOIS FARM FLASH (and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 4½ minutes

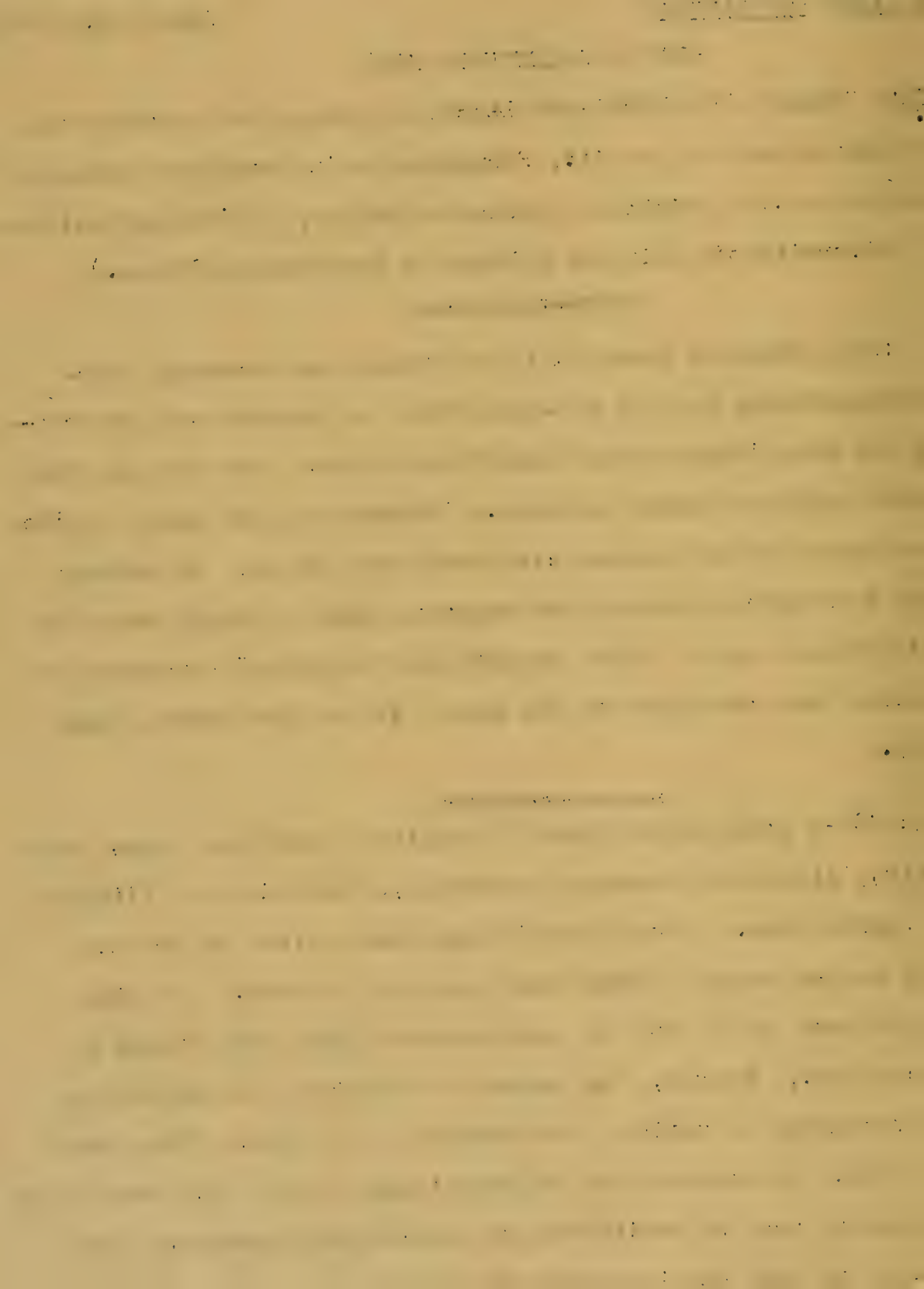
April 29, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(:25) Everyone knows Illinois farmers are throwing themselves wholeheartedly into an all-out effort to produce food for freedom. The old adage "haste makes waste" holds true. So warn new farm workers that haste can cause accidents. Perhaps in your hurry, you've left an axe where you or someone else could step on it. Or perhaps you've left a pitchfork against the haystack where it might cause an injury. If you are one of those thoughtless "hurriers," remember you may be playing into the hands of the axis. If you must hurry, make haste safely.

(:40) A good pasture doesn't require a very good fence, says E. T. Robbins, livestock extension specialist, University of Illinois College of Agriculture. Stock doesn't make much effort to get out unless they become hungry because the grass is too short. At this late date not much can be done to make pasture yield more forage to the acre this year. However, the amount of feed for each animal can be greatly increased by putting fewer animals on an area. Then there is plenty to eat, the animals are contented and, best of all, they gain much more rapidly than is possible on an over-stocked pasture. Not only the gain for each head is increased but the gain for each acre as well. A two-wire fence around a good pasture is more effective for cattle than is a four-wire fence around an over-stocked area.



(1:05) Both farm and city gardeners who want a garden crop that will produce a lot of food without too much work might try sweet potatoes.

Sweet potatoes--especially the varieties with the yellow flesh--pack just about as much food into a small space as anything you can grow. The yellow varieties not only make a good "filling" food, but they're full of vitamins and minerals to help keep folks healthy.

And, when planted after the last frost and under favorable growing conditions, sweet potatoes yield well. The average gardener or farmer gets anywhere from 80 to 150 bushels of sweet potatoes to the acre. With the best management, fertilizing and disease control, many farmers get even 200 or 300 bushels to the acre.

While sweet potatoes will do fairly well on a variety of soils, the ideal soil for sweet potatoes is a light, well-drained sandy loam with a clay subsoil. On moderately heavy, highly fertile soils that are especially good for some other crops, the sweet potatoes tend to run to vines. Plant on ridges in northern areas on heavy soil.

With reasonably good soil and reasonably good care, sweet potatoes will produce a lot of food that will probably prove mighty welcome next fall and winter.

(1:20) Here's an idea for some of you folks who haven't any room for a victory garden. Try a few vegetables in your flower borders. Vegetables of the leafy green and salad varieties team well with flowers in a sunny, fertile garden border. They'll give us vitamins, minerals and flavors we need every day in the diet.

Leaf lettuce and radishes make fine edgings for a row of flowers, and you can stick in a few onion sets almost anywhere. These vegetables will furnish the basis for green salads for the family

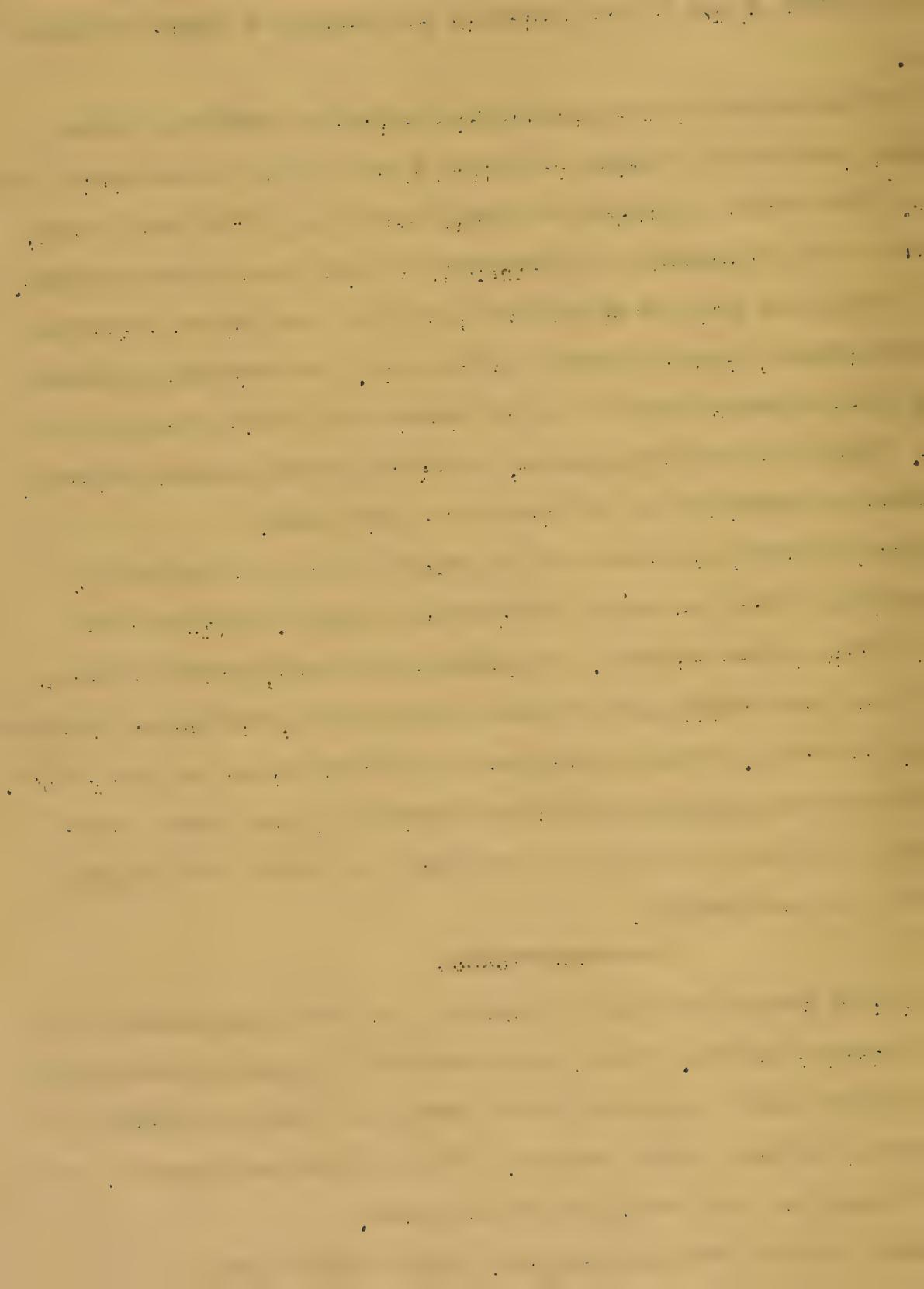


table through the early summer and late fall. The ferny foliage of parsley looks well among flowers. Three or four plants will supply the needs of the average family.

A staked tomato vine needs about the same space as a dahlia, and 12 or 15 plants will supply enough tomatoes for salad all season. Set the plants back next to the fence and tie them up good. When the vines are hanging with plump red tomatoes, they will be as pretty as flowers. A couple of sweet pepper plants will meet your salad needs and only take up three or four square feet apiece.

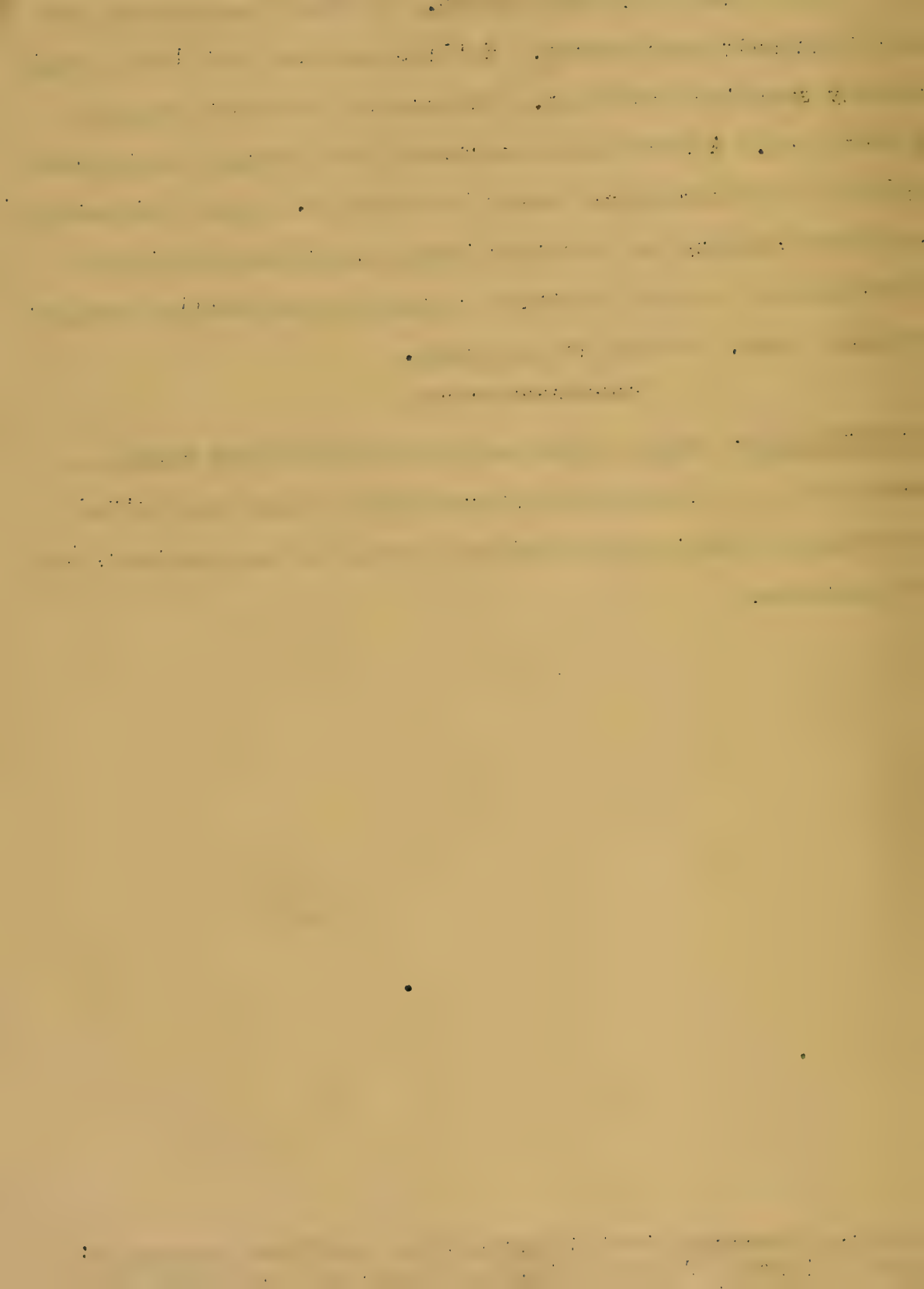
Chard is an excellent green to grow among flowers. When you harvest it, pick off the leaves around the outer edges, and the plants will produce for a long time. Comparatively few chard plants will produce greens enough for a surprising number of meals. Spinach, turnips and kale also fit into this picture.

Carrots and beets are good for small space. You can get about four plants to a square foot. Each vegetable has nice foliage and looks well behind mignonette or ageratum.

(1:00) Old Dobbin has her nose in the news again this morning. Just a few suggestions on the farm horse in hot weather. Steady work during the early part of the season is essential for hot weather success when it comes to work horses. When the weather doesn't permit field work, many farmers resort to road dragging or even "made work" in order to get and keep horses in condition to stand a hard day's work later on. Green pastures at night are a good bowel regulator. If the pasture is dry or burned out, remember to feed some legume hay or bran. And another point. We wouldn't expect a man to work for five hours in the harvest field in hot weather without a drink of water. That's something else to keep in mind for horses when the mercury rises.

Take a barrel of water and a pail to the field during hot weather and give the horses a drink every hour or so. A freely perspiring work horse has a high salt requirement. He'll stand the heat lots better when liberally supplied with salt. The careful horseman stops to rest his team, too. A horse once overheated even though he recovers is seldom able to do hard work during hot weather. Good "hot weather" horses owe their ability to withstand high temperatures partly to heredity and partly to good condition resulting from skilled management in working them, feeding and watering.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.



Speaking time: 4 $\frac{1}{4}$ minutes

May 3, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(:15) War plants have plenty of safety posters, and farmers now have signs on machines to remind them of hazards to avoid. So, it's up to farmers to discover all hazards that are not marked, to instruct new workers in safe practices and to see that every possible precaution is taken to prevent accidents.

(1:00) Higher incomes now offer Illinois farmers an opportunity to replace some of the phosphorus that has been sold from their farms in crops and livestock during the past 75 or 100 years, says J. M. Linsley, assistant professor of soils extension, University of Illinois College of Agriculture. The phosphorus account in the fertility bank has been overdrawn, and putting it back is like putting money in the bank. Lack of phosphorus is holding down yields of clover and alfalfa. And poor crops of clover and alfalfa don't supply enough nitrogen and organic matter for high yields of corn, soybeans and other crops. Low yields and poor quality of clover and alfalfa hay and pastures are also serious handicaps for production of meat and milk needed in the war.

The common rate of application of rock phosphate is 1,000 pounds to the acre. This amount should last ten years or more. It's generally applied ahead of clover or alfalfa, but may be applied any

time in the rotation. The important thing is to get it on the land that needs it.

The demand for rock phosphate will probably increase next year. Hence it may be difficult to get prompt delivery. Where farmers have storage space, rock phosphate should be ordered early, Linsley says, and stored until it can be spread.

(:45) Dairy specialists say that the wise dairyman will raise as much protein as he can on his own farm.

With the tremendous demand for high-protein feed, no dairy farmer can risk depending on commercial high-protein feeds for his cows next fall and winter.

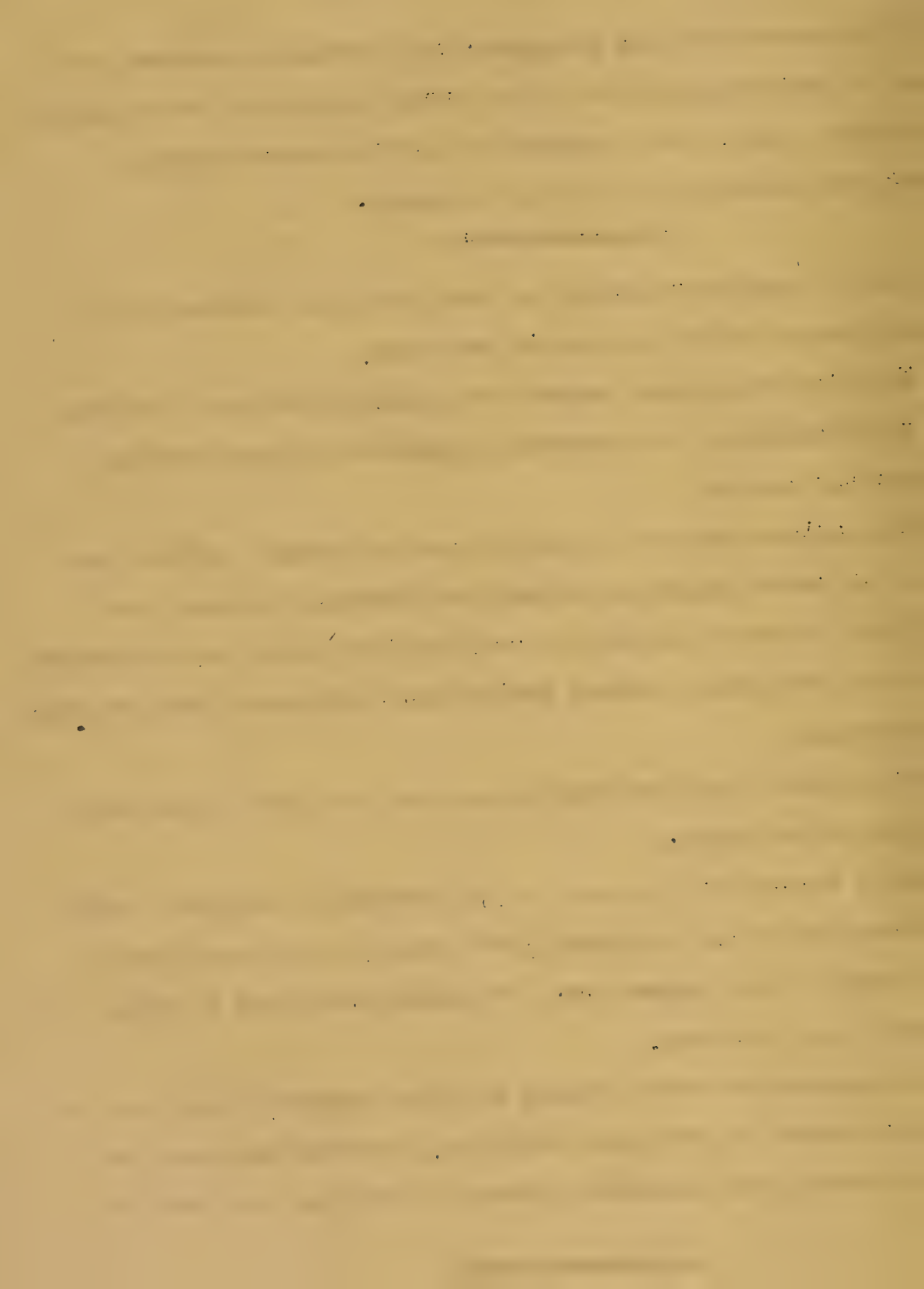
The easiest and most practical way to provide protein for dairy cows is to raise legume crops such as alfalfa, soybeans, and lespedeza. With plenty of legume hay -- plus farm grains -- a dairyman can keep up milk production without buying any ready-mixed feed or high-protein feed at all.

Now a word about how much legume hay cows need along with corn silage and other forage.

For a barn-feeding season of six months, a large cow, say a Holstein or Brown Swiss cow weighing 1,200 pounds, would need pretty close to two tons of good legume hay. She would also need a little more than three tons of silage.

With around two tons of good alfalfa, soybean, lespedeza or some other good legume hay for each large cow, dairymen can keep up milk production with less commercial protein feeds than are usually recommended.

(1:15) In the past it didn't make much difference if some dairymen fed too much high-protein feed. It cost little if any more



than the low-protein feeds -- and we had plenty of it. But things are different now. We don't have enough high-protein feed to meet the big demand. The farmer who feeds more than his stock need is cutting off other farmers who need more protein to keep up production of meat, milk and eggs.

From a large number of experiments by various agencies, dairy specialists estimate that a 900-pound Jersey cow producing 30 pounds of milk a day needs about 2 1/2 pounds of protein a day.

If that cow gets 12 pounds of alfalfa hay each day, along with silage or other forage, she needs at least 12 pounds of grain or concentrate mixture to maintain her production without undue decline. If that mixture has as much as 12 per cent protein, that cow will get all the protein she needs.

Of course, with less alfalfa hay in the ration, the cow would need more protein in the concentrate mixture.

But, when a cow is getting only good alfalfa or other legume hay as roughage, a 12 per cent protein mixture provides enough protein to keep up milk production. Any more than 12 per cent does the cow little good, and may take protein away from poultry or hogs that are not getting enough protein.

(1:00) So you're going to keep chickens? Well, your chickens may be out on a limb if you don't read a new six-page leaflet designed especially for you "first timers" in the poultry business. It was written by L. E. Card, chief of the poultry division, University of Illinois College of Agriculture. It answers such questions as which variety is best, how many hens to keep, preserving eggs for home use, what size and style of house, what and how to feed, what to do with broody hens, how to build hoppers, controlling diseases and parasites

and how to settle other chicken troubles, too. I almost forget to mention that this six-page leaflet is free for the asking. If you would like to have a copy, just drop me a card _____ in care of _____ (announcer) and I'll see that you receive your copy right away. (station) If you're raising chickens this year for the first time, or if it has been a number of years since you raised chickens, I'd suggest you write for your free copy of the chicken leaflet right away. You may call for it by name or number, 1394, or just ask for the chicken leaflet. If we're going to raise chickens, a lot of them will be "out on a limb" if we don't read it.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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THIRTY-SIXTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 4½ minutes

May 6, 1943

(FOR BROADCAST USE ONLY)

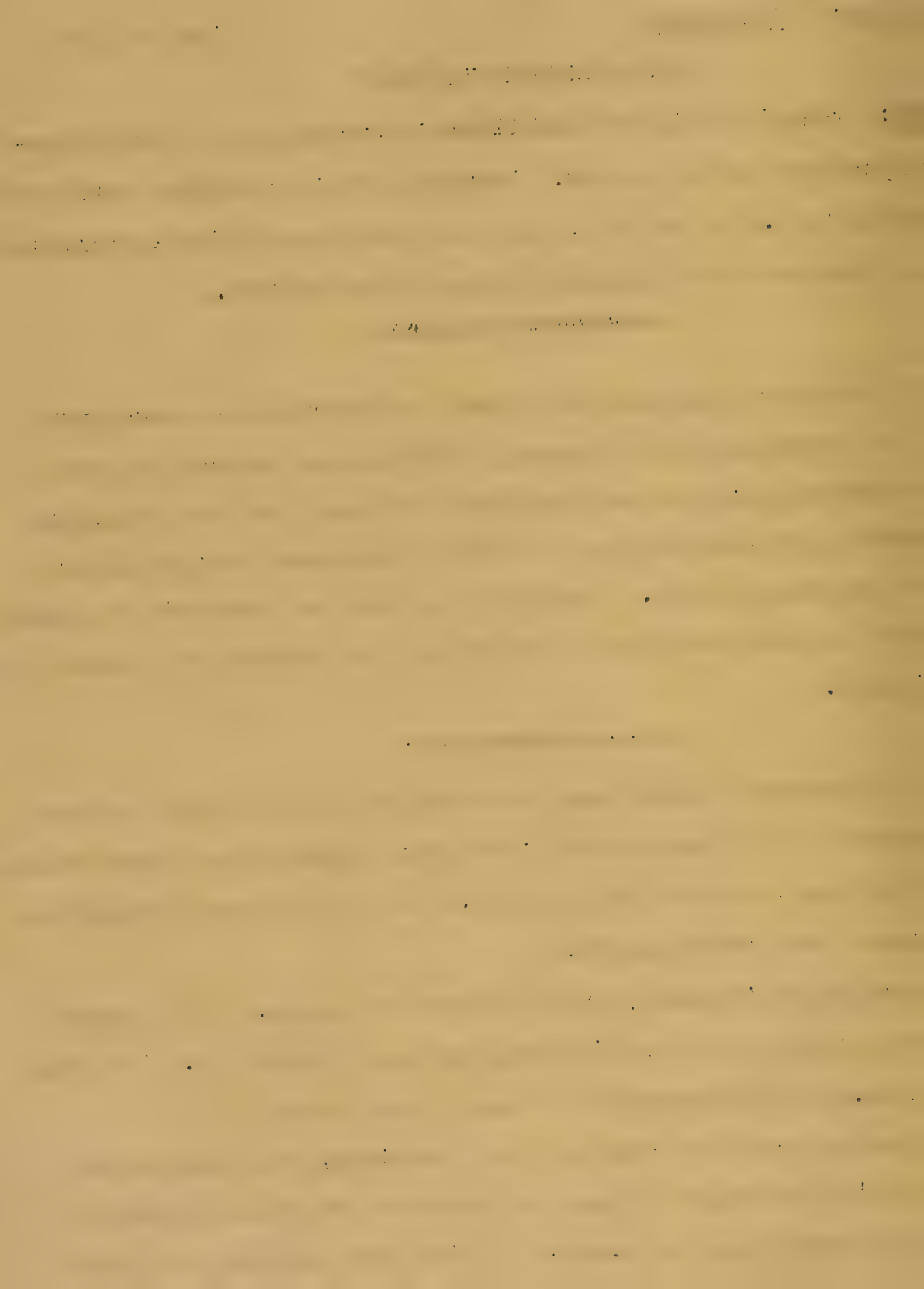
(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture.)

(:15) Milking a cow from the right, or harnessing a horse from the left is second nature to farmers. But the new workers on your farm this year may have to be taught such things. Be sure they know how to handle livestock and how to operate machinery and implements before you put them to work. The time you take to teach and to remind your helpers to work safely will pay off in time gained as a result of fewer accidents.

(1:00) A victory garden enemy that may soon start raids on your cabbage plants is the flea beetle. It's also likely to go after beans, turnips, tomatoes, potatoes and eggplant. So here is some information on this insect from entomologists.

The flea beetle is small, brown, black or striped. It displays one characteristic that helps the home gardener identify it. It lives up to its name. When disturbed, it jumps like a flea.

Flea beetles are very fond of young seedlings, the younger the better. So it's important to keep on the watch for these pests from the time your seeds begin to sprout. If the flea beetles get a head start, they may destroy a large number of your plants before you even know they're in your garden. They gnaw small holes, feeding from the



top sides of leaves. A leaf on which they have fed often looks as if it had been fired on with fine shot.

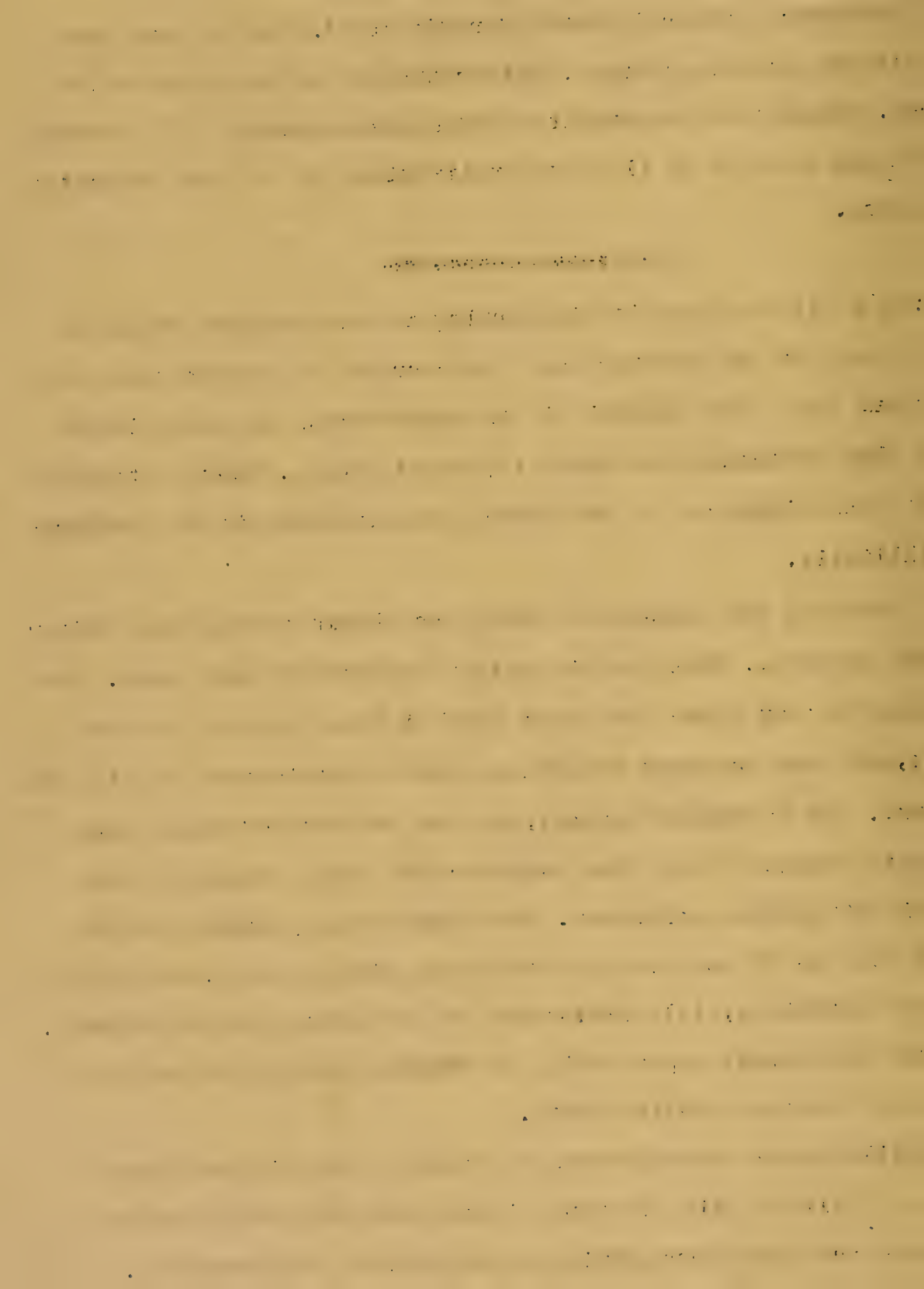
The preferred control method for flea beetles is to dust with cryolite in the seedling stage. After that use a dust or spray of pyrethrum. Repeat the treatment as often as necessary. If it rains often, you may need to do it five or six times, to get the situation well in hand.

(1:00) A fifth columnist is lurking in home orchards ready to sabotage a part of the victory home food supply if measures are not taken to oust him. The culprit is the cankerworm, the same insect which has been attacking elm trees in recent years. Damage to apple trees has been widespread in unsprayed home orchards in the northern half of Illinois.

The larvae of the cankerworm hatch and begin feeding soon after the foliage appears. They can be easily poisoned at that time. The prebloom cluster bud spray for apple scab is being put on at about that time, and lead arsenate should be added to this spray to kill the cankerworms. For a complete spray, use two gallons of liquid lime sulphur or six pounds of dry lime sulphur plus three pounds of lead arsenate in 100 gallons of water. The calyx spray, which is to be applied as soon as 75 per cent of the petals have fallen, consisting of the same materials, will finish the job of ousting the saboteurs. Two or three additional sprays will, of course, need to be put on to control apple scab and codling moth.

A detailed spray schedule for all fruits grown in home fruit plantings in Illinois will be found in circular 524, which may be secured free from your farm adviser or by writing this station.

(1:05) Here's a little item on ants I picked up from B. G. Berger, assistant entomologist of the Illinois State Natural History Survey.



A number of you have been asking about ants and how to combat them, so let's check up and see what's the best way to go about it.

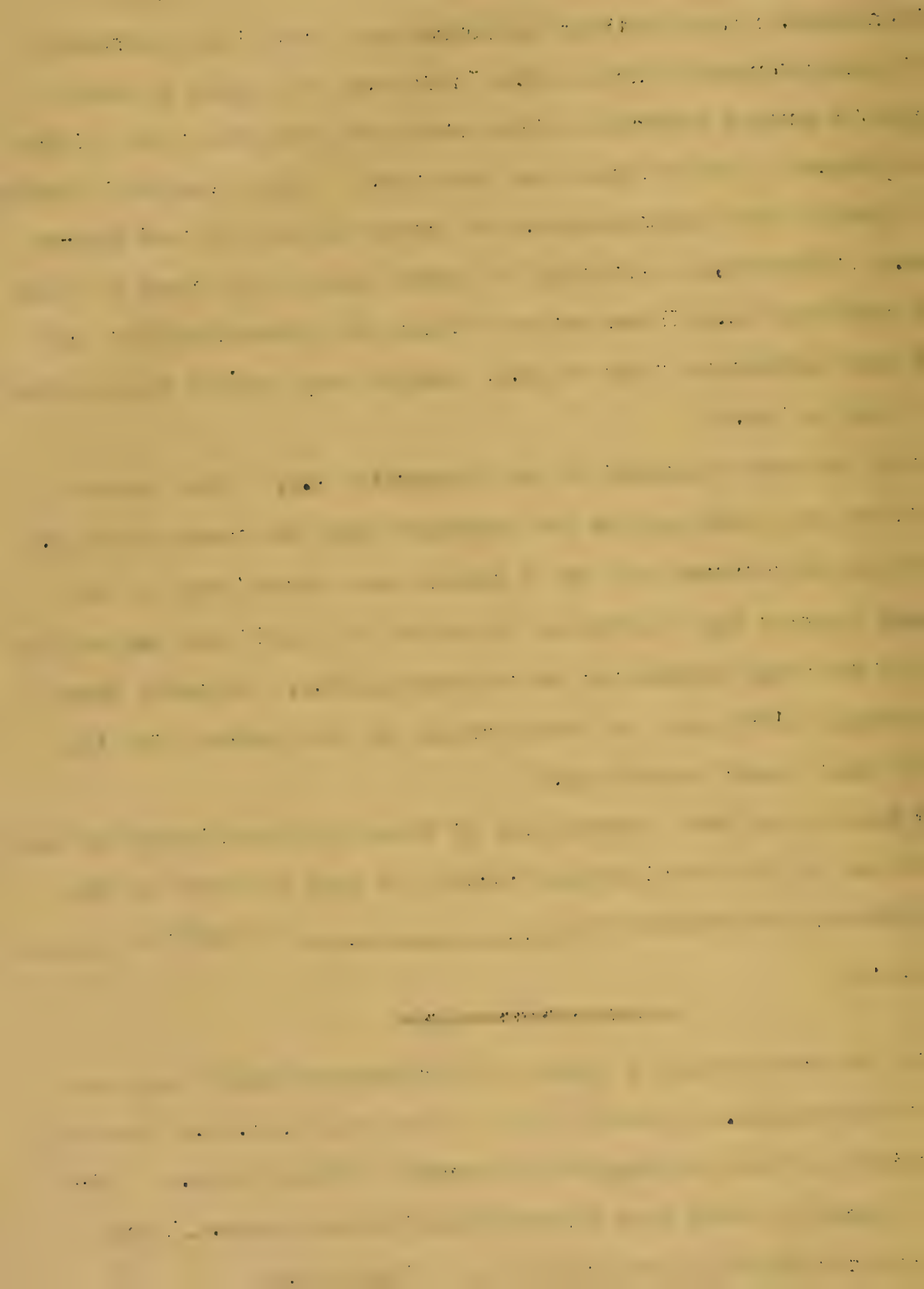
Incidentally, ants are the most abundant of all the different kinds of insects found in the world. In fact, you could go over a square rod of ground anywhere in the state and find from one to five different kinds. Most of them stay out doors. Many, however, invade houses. They're the most annoying and persistent of all our household pests. Of course, in trying to combat them, we'll need to find out what kind they are. Then we can follow the directions for controlling that particular type of ant. Berger says that's an important point to keep in mind.

One of the most annoying is the Pharaoh's ant. Then there's the thief ant and large yellow ant together with the large black ant. The cornfield and odorous ant are a couple more which live in the soil. They feed on the excretions of aphids or plant lice and may be responsible for some trouble in our victory garden. The ants themselves probably won't give you much trouble in the garden, but the plant lice they "pack" around will.

Just how we can best control all of these different kinds of ants is pointed out in Illinois circular 4-5-6. A copy is free for the asking. Address your request to _____ in care of _____.

(1:10) We seem to have a number of discussions about pests on the docket this morning. Here's one on moles from Dr. R. E. Yeatter, game specialist of the Illinois State Natural History Survey. Incidentally, I hope no moles have visited your victory garden. They certainly can go after it like a bull in a China shop.

But if the culprit is abroad in your cabbage patch or lettuce row, here's a tip from Dr. Yeatter. Visit your garden early in the



morning or after a rain. Watch closely and you'll see the mole work. A quick jab into the soil with a shovel or spade right behind him, a flip of the hand----he's only about three or four inches under the dirt----and the animal is on top of the ground. A none to gentle tap with the shovel and the mole's a "gone gosling." Just keep in mind though that more than one mole may be using the same runways. So keep looking for a few days to see if you can get any more of his relatives.

Traps are effective, but this is war, so you may not be able to get traps. Creosote, naphthalene, lysol or any similar substance possessing a strong odor can be applied on all sides of the plot as a barrier. Directions for the application of these are contained in that pamphlet which many of you folks wrote in about when asking how to control rabbits in your victory garden. If you don't have a copy, drop me a card, _____ in care of _____ and I'll see you receive your copy right away. Ask for the leaflet on the control of moles or rabbits. They're together now as saboteurs in our victory garden.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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THIRTY-SEVENTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture and Home
Economics, University of Illinois College of
Agriculture, in cooperation with U. S. Depart-
ment of Agriculture)

Speaking time: 6½ minutes

THE LIBRARY OF THE

May 10, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(:30) The producers of food for freedom can't afford to lose you. So let's keep in mind safety first, last and always throughout the entire year. Here's a suggestion worth remembering today. If you're going to enter an old well or a tightly closed silo, be sure to first lower a lighted candle or lantern. It's a well known fact that a light goes out when there isn't enough oxygen to sustain life. If there's reason to suspect the air in a silo is dangerous, be sure the door just above the silage is open before you enter. Use a blower to rid the silo or well of gas. No sir, we just can't afford to lose you in 1943.

(:30) Here are a few do's and don't's in selling timber from L. B. Culver, forester, University of Illinois College of Agriculture. Don't accept the first offer that may come your way. Don't sell by the acre or the piece. Investigate the various market outlets, get the Directory of Markets for Illinois Forest Products if you need it. Just drop me a card here at _____ and I'll see that you receive your free copy. Find out how much you have to sell. Remember to sell by log scale and log grades if local conditions permit. Sell the logs delivered to the mill if you have the equipment and labor to do the job.

(1:15) Quite often we receive a number of questions from you folks out there on the air about how you can grow a better garden, raise better chicks, what's the best variety of certain crops, and a lot of similar questions. Of course, we always look up the person who devotes his life's work to that particular subject so we can make sure you receive the right answer. Once in awhile we receive questions that seem to be of general interest, questions--in other words--to which a lot of you would like to hear the answers.

For instance, here's one from a farmer who says he has 20 acres of weed-free timothy and he wants to know if it would pay him to harvest it for a seed crop. Well, the answer is definitely "yes." There's likely to be a shortage of forage crop seeds this year. In fact, millions of pounds of forage crop seeds are being purchased and shipped abroad. There's an unusually large demand, and our own farmers will be short of forage seeds unless much more than usual is harvested for seed.

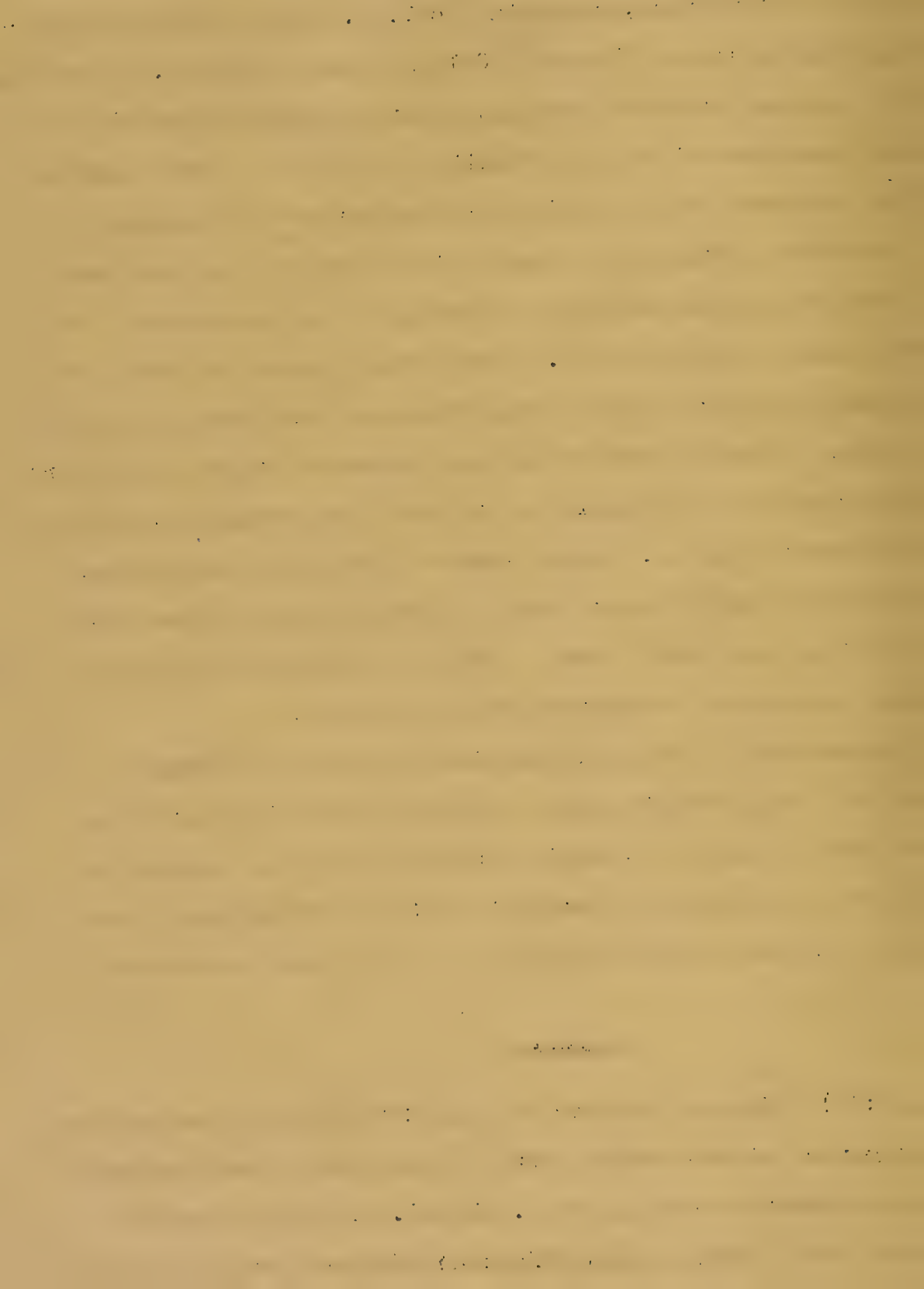
Here's another question about soybean inoculation. That's something we put on legume seed to make them grow better. This party asks if edible soybeans (the kind we can grow in our victory garden) require the same kind of inoculants as the grain type. Yes, they do. And here's one year when inoculation of all soybeans is particularly important.

Finally, another question asking whether it's too late to seed alfalfa. Probably not if the land is relatively free from weeds. However, it would be safer to cultivate the land during the summer, kill as many weeds as possible, and sow alfalfa in early August. With the high price and the scarcity of alfalfa seed, it's better not to take a chance on failure.

(1:00) Things are looking up for Illinois peach growers as far as a crop is concerned, according to V. W. Kelley, extension horticulturist, University of Illinois College of Agriculture. You recall that earlier reports indicated adverse weather conditions would result in a sizeable decrease in the 1943 Illinois peach crop. But reports received from growers indicate there'll be about as many peaches as a year ago, which was estimated at some 12 to 13 hundred carloads marketed--not including those which you ate or gave your neighbors. And that was only half a normal crop. Reports from growers in the Flora, Olney, Lawrenceville area indicate that Elbertas have been practically wiped out again. However, growers in the Centralia region, who first reported their crop had been wiped out by zero temperatures, now say they'll market some peaches. Reports seem to indicate, Kelley says, that orchards which didn't have a crop a year ago seem to have more peaches than those which had a crop. This is perhaps the result of stronger buds which came through the winter better.

Incidentally, Illinois strawberries should be coming to market about the 20th of this month. The crop will be about 25 per cent smaller than a year ago. While there has been some heaving of plants the decrease is mainly a result of labor difficulties a year ago which resulted in fewer berries being set out and less renovating of patches.

(1:15) You know, it may seem a little early to be talking about cabbage worms in the garden, but the other day I saw the first cabbage worm butterfly of the season. Now H. B. Petty, extension entomologist of the Illinois State Natural History Survey, says that means cabbage worms in about two or three weeks. These little white



cabbage worm butterflies (you know what they look like) lay small yellow eggs on the cabbage leaves. It doesn't take long for the eggs to hatch and develop into the velvet green worm that eats holes in your cabbage. You'll need to look for them quite closely, because they look just about like the cabbage.

Right along with them you may find the cabbage looper, an inch worm. He's the one who goes along measuring his way. Some of us used to say it meant a new suit of clothes when one of those inch worms accidentally dropped on our coat sleeve and proceeded to measure his way along. Well, the cabbage worm and inch worm can be controlled. If you just have a few plants, hand-picking will prove to be a very profitable operation. Drop the worms in a tin can as you go along and destroy them later.

However, if your cabbage patch is too large for that, follow the directions given in the leaflet "Insecticides." Many of you folks have been writing in for that leaflet and we still have a few copies left. The recommended control for cabbage worms is one part of lead arsenate with three parts of hydrated lime. Just dust it on the plants. Remember, though, not to use it later than a month before harvest. It's poison, so if you dust your cabbage with lead arsenate and lime later than a month before harvest, peel the leaves pretty far back on the cabbage head. No use to take chances.

(1:00) If we can't raise chickens, we'll preserve our own eggs. Yes, sir. I just found out how to substitute some sodium silicate for a few biddies in my back yard, and here's how it's done, according to L. E. Card, chief of the poultry division, University of Illinois College of Agriculture.

Just get yourself a six-gallon crock or a clean, galvanized can. That will take care of 15 dozen eggs. If you want more eggs, get more cans or crocks. Then purchase some sodium silicate (or "water glass" as it's sometimes called) at any corner drug store and you're ready to begin.

Dilute one quart of the sodium silicate with 10 or 11 quarts of water, stirring thoroughly in the jar. Use only fresh eggs with clean, sound shells, adding them to the solution a few at a time. Place them just below the surface of the mixture so they'll settle easily to the bottom of the container. If stored in a reasonably cool place and covered to prevent evaporation, eggs in the solution may be kept for six to nine months.

By the way, remove the eggs only for immediate use. Wash them to remove the coating of the solution before the shell is broken. Here's another point, too. Before boiling preserved eggs, make a pin hole in the large end of the egg to permit the air to escape and prevent the shell from bursting.

(1:00) Are you buying baby chicks this year? If you are, you'll be interested in this little leaflet on chick brooding and rearing by E. P. Singsen, assistant in poultry husbandry, University of Illinois College of Agriculture. This leaflet describes the best way to buy baby chicks, how to provide heat; how to arrange and manage the brooder house and pens and all about providing water and feed. It tells about the "victory" chick starter which has come about as a result of the nation-wide shortage of vital proteins. You can see at a glance how much feed you're going to need to provide for the chickens you'll raise this summer, too. On the back cover there are a number of

illustrations of pieces of equipment that will come in mighty handy especially for you folks who will be raising chicks for the first time in 1943.

Now this leaflet number is 1397, that's 1-3-9-7, and if you'd like a free copy just drop me a card, _____ in care of _____. Call for it by name or number-----1397, or brooding and rearing chicks. We're eager to help all of you who will be raising chicks for the first time this year and we believe this leaflet 1397 will do the trick.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics
University of Illinois College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

THIRTY-EIGHTH ILLINOIS FARM FLASH (From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 6:05 minutes

UNIVERSITY OF ILLINOIS

May 13, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture.)

(:10) One suggestion that can't be overlooked by any patriotic farmer this year is to operate his machine carefully to prevent any chance of injury or delay. The careful farmer is never in such a big hurry as to take unnecessary risks.

(1:00) Here are some do's and don'ts in transplanting. Don't buy plants that are badly dried up or withered, nor those that are very yellowish or whitened. Avoid very young and sappy, or very old and woody, plants. Be sure to examine the stems for blackened areas and the leaves for various spots and discolored areas which indicate rots and diseases. Inspect all cabbage plants for aphids (plant lice) and reject them if any aphids are found. You know, aphids are those small, greenish-gray, inactive creatures usually found in clusters on the underside of the leaves.

Most of you, no doubt, have set cabbage plants. But you can still set some more. Cauliflower and Italian broccoli plants can be handled the same way as cabbage. Peppers and eggplant are grown the same way as tomatoes. Incidentally, it's usually safe to set tomatoes in central Illinois about May 15 or 20.

There are a number of good suggestions on plants for transplanting in the victory garden in a six-page leaflet by the same name.

It was arranged by Lee Somers, associate in vegetable gardening extension, University of Illinois College of Agriculture. If you'd like a copy, just drop me a card, _____ in care of _____ and I'll see that you receive your copy right away. Ask for leaflet on transplanting.

(1:00) Spraying will be necessary in home fruit plantings to insure crops of tree and small fruits in the food for victory program, according to V. W. Kelley, fruit extension specialist, University of Illinois College of Agriculture. Brown rot of plums, especially, causes serious losses when conditions are favorable. Control measures must be applied early, although losses occur later near the harvest period. The plum curculio, a sucking insect, punctures the young fruit very early in the season. This makes the fruit susceptible to brown rot. A fruit spray consisting of six pounds of dry lime-sulphur and three pounds of lead arsenate in 100 gallons of water should be applied about 10 days after bloom when the shucks are pushed off the young fruits. A second spray consisting of the same material should be applied about 10 days later. A third spray consisting of six pounds of dry lime-sulphur or eight pounds of wettable sulphur should be applied about one week before harvest. Omit the lead arsenate from this spray. Directions for spraying fruits in home plantings are given in circular 524. A copy is free for the asking. Address your request to this station.

(1:45) Aphids or plant lice are one of the half dozen insect groups every victory gardener needs to know and know how to fight.

Entomologists point out that aphids are smaller than the average insect pest you'll find in your garden. They have soft bodies and many are green. But some are pink, and others brown and black.

They concentrate on the leafy green vegetables such as cabbage, kale, turnips, lettuce, broccoli and collards. Aphids that are a little larger than the general run of this insect group go for peas. The tiniest plant is not too small for a hungry aphid, so start watching for aphids as soon as green leafy vegetables begin to come up.

Look for aphids in clusters at the ends of twigs and shoots, and on the undersides of leaves. Also along plant stems. They are sucking insects, which means they have mouths like tubes and feed by drawing the sap out of plants. Young shoots weaken and die, and leaves curl and thicken.

The ammunition to pass out for aphids is a spray or dust mixture. If a spray is used, put one teaspoonful of nicotine sulphate in a gallon of water, and shave up a one-inch cube of mild laundry soap and mix in the water. Spray a few plants to see if you have enough soap in the mixture. If not, the spray will draw together in drops, and you need to add a little more soap. If a dust is used, put two tablespoonfuls of nicotine sulphate with one pound of hydrated lime. Shake them together thoroughly.

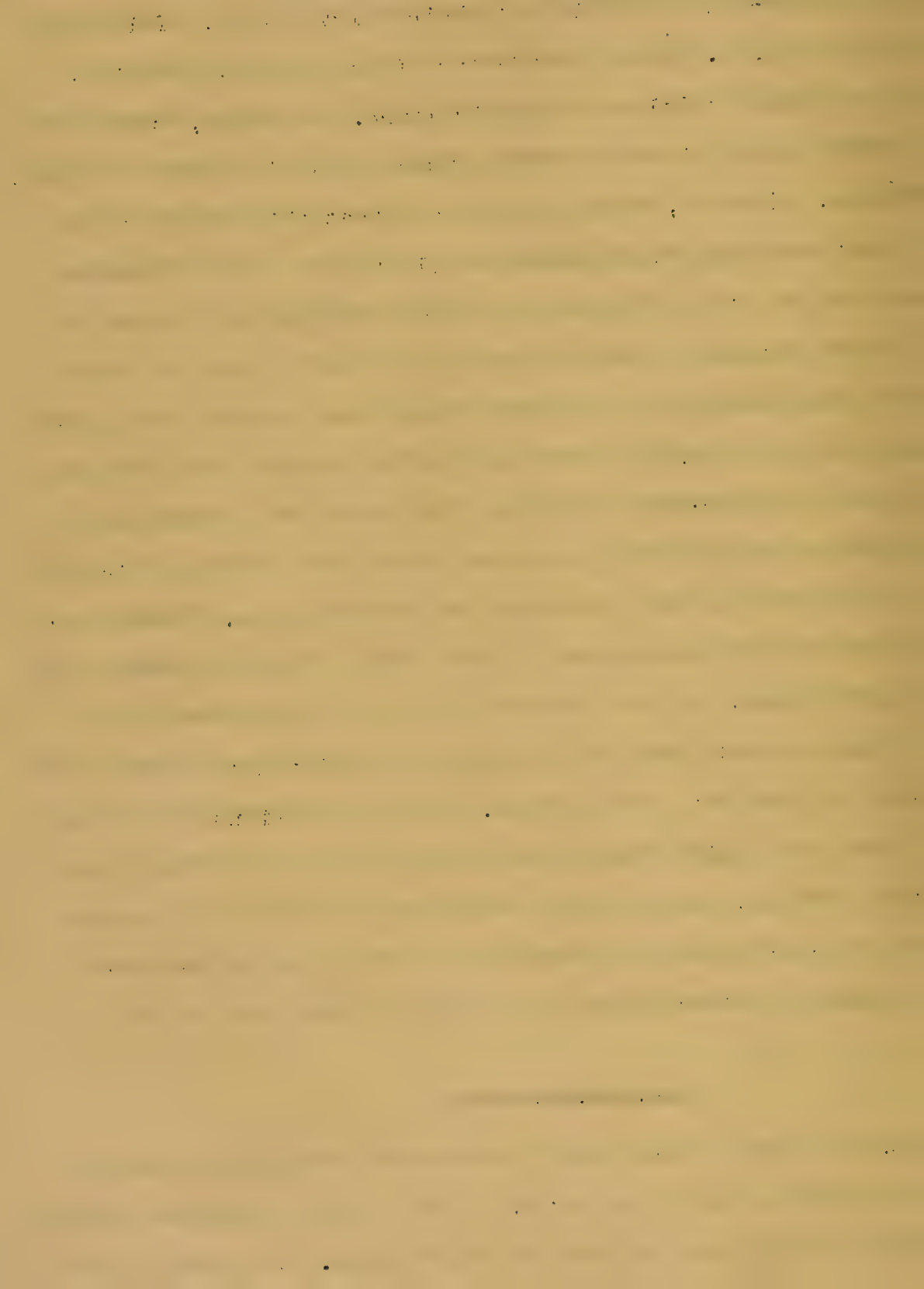
The trick to destroying aphids is to actually get the spray mixture on their bodies. You can not get poison into their stomachs as you can in the insects that chew up their food.

You will save work and your plants if you spot and destroy the very first aphids to appear in your garden. The majority are females, and they mature in a few days. They increase so fast that they can descend on your garden in hordes if you are not on guard.

Their natural enemies do not bother them much in cool, damp weather. So that's the time they get in their best work sabotaging your work to grow food.

(1:10) Illinois farmers who are planning to seed Sudan grass as a temporary pasture can well keep in mind a number of precautions to prevent prussic-acid poisoning in their dairy cattle. This report comes to us from W. B. Nevens, professor of dairy cattle feeding, University of Illinois College of Agriculture. You know, Sudan grass can cause sudden death in cattle when prussic acid is present in high concentrations. However, Nevens points out that this danger can be avoided by not pasturing Sudan grass until it is at least 18 inches high. Then, one or two of the least valuable animals can be put on the grass before turning in all the cattle and left there for a few hours to test the forage for poisonous properties. Also, it's a good idea to feed the cattle well in the barn before turning them for the first time into a Sudan-grass pasture. When there is a rapid new growth of Sudan grass following a severe drouth or a frost, it's best not to let the cattle pasture the crop for several days. Poison may be found in new shoots that appear at this time. The very young crop may also be poisonous. Be sure the soil is well fertilized. The possibility that prussic acid will develop is believed to be much less when the crop is grown on fertile soil. Such precautions do not take away any of the good points that Sudan grass has as a temporary pasture for dairy cattle, Nevens adds. Seeded at the rate of 25 pounds with one and one-half bushels of soybeans to the acre, it makes an excellent temporary pasture which can be used within four or six weeks.

(1:00) Illinois dairy herd improvement associations can use some more cow testers, according to J. G. Cash, dairy extension specialist, University of Illinois College of Agriculture. You know, 25 associations have had to fold up because there just wasn't enough testers to meet the demand.



This matter of testing is a job which physically handicapped young men with a farm background can learn to do. In some states, including Illinois, a number of girls with a farm background have become cow testers. For example, Miss Janet Standish, of McHenry county, just finished a year of cow testing in March. Other women testers in Illinois and the associations they serve are Louise Samelson, Boone No. 1; Gleneva Skelton, Henry-Rock Island; Eleanor Hughes, Kendall; Isabelle Holt, Knox; June Lahman, Ogle; Mrs. Marilyn Johnston, Macoupin; Orlean Franke, Madison; Mrs. H. F. Cross, Champaign; Mrs. Gladys F. Downey, Kankakee No. 2, and Dorothy Leech, Winnebago No. 1.

If you're interested in becoming a tester for the dairy herd improvement association contact your farm adviser, the University of Illinois College of Agriculture or address your card to this station.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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THIRTY-NINTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture

Speaking time: 6:35 minutes

May 17, 1943

(FOR BROADCAST USE ONLY)

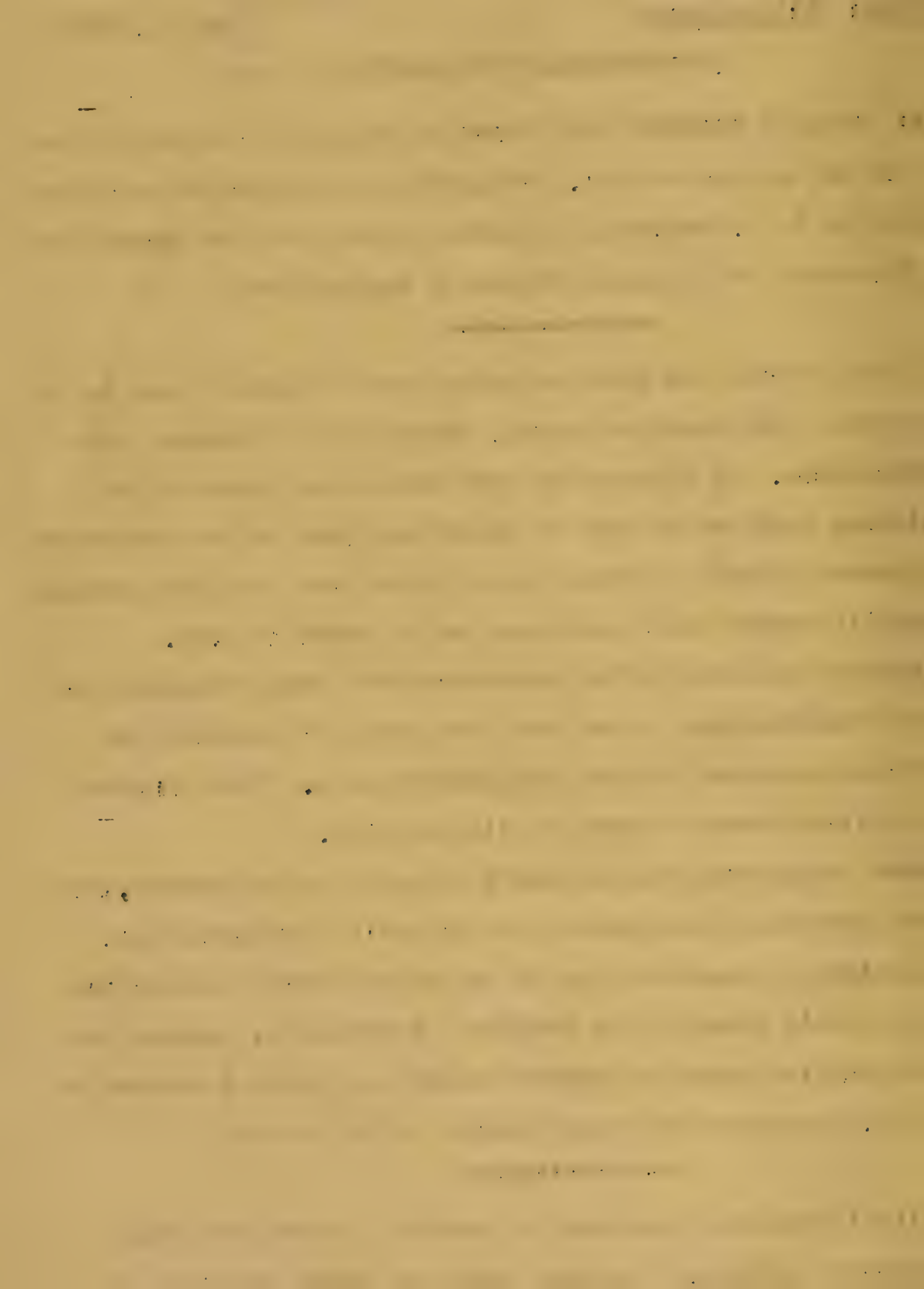
(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture.)

(1:00) "Curve the rows and strike out the axis," says E. D. Walker, extension soil conservationist, University of Illinois College of Agriculture. By running the rows across the slope on the contour, sloping land can be made to contribute most to the war effort through increased yields. Because these fields lose less soil through erosion, they'll produce more next year and in years to come.

Results compiled by the University show that contoured corn yielded seven bushels more to the acre than corn not contoured in 1942. Contoured soybeans yielded four bushels more. These figures were based on farm account records in six counties.

Even though the seedbed wasn't prepared on the contour, corn still can be planted in this manner, and it isn't a difficult job. Any farmer desiring a demonstration of the method should contact his farm adviser or Soil Conservation Service. Furthermore, farmers can earn their production practice payments under the Triple A program at the rate of \$1.50 an acre for crops planted on the contour.

(1:10) Poisonous compounds to control insects have been used by commercial gardeners for many years and there have been no fatalities. Home gardeners should be able to duplicate this, in the opinion of H. B. Petty, extension entomologist of the Illinois State



Natural History Survey. He says to notice and remember the poison label the manufacturer puts on the package, and remember he wasn't fooling. Handle these materials with the respect they should have.

Store insecticides some place other than the kitchen. If placed on the cabinet shelf it's easy to mistake insecticides for a cooking material, and there's always the danger of spilling them on foodstuffs, too.

Many of you will be using for the first time, in controlling garden insects, materials that are unquestionably poisonous to humans, such things as lead arsenate, calcium arsenate, Paris green, Bordeaux mixture, flourine compounds or nicotine sulphate. Wash your vegetables thoroughly if they've been dusted with one of these compounds. Don't treat vegetables with them if the part treated is to be eaten within the next four weeks. Crops like broccoli and cauliflower should not be treated after the heads are beginning to form. The same is true of beans after the pods are forming.

When it is no longer safe to use such dusts as we've mentioned, Petty says that dusts containing pyrethrum or rotenone should be used. These usually appear under trade names, but the contents will be listed on the outside of the package. Such dusts are not poisonous.

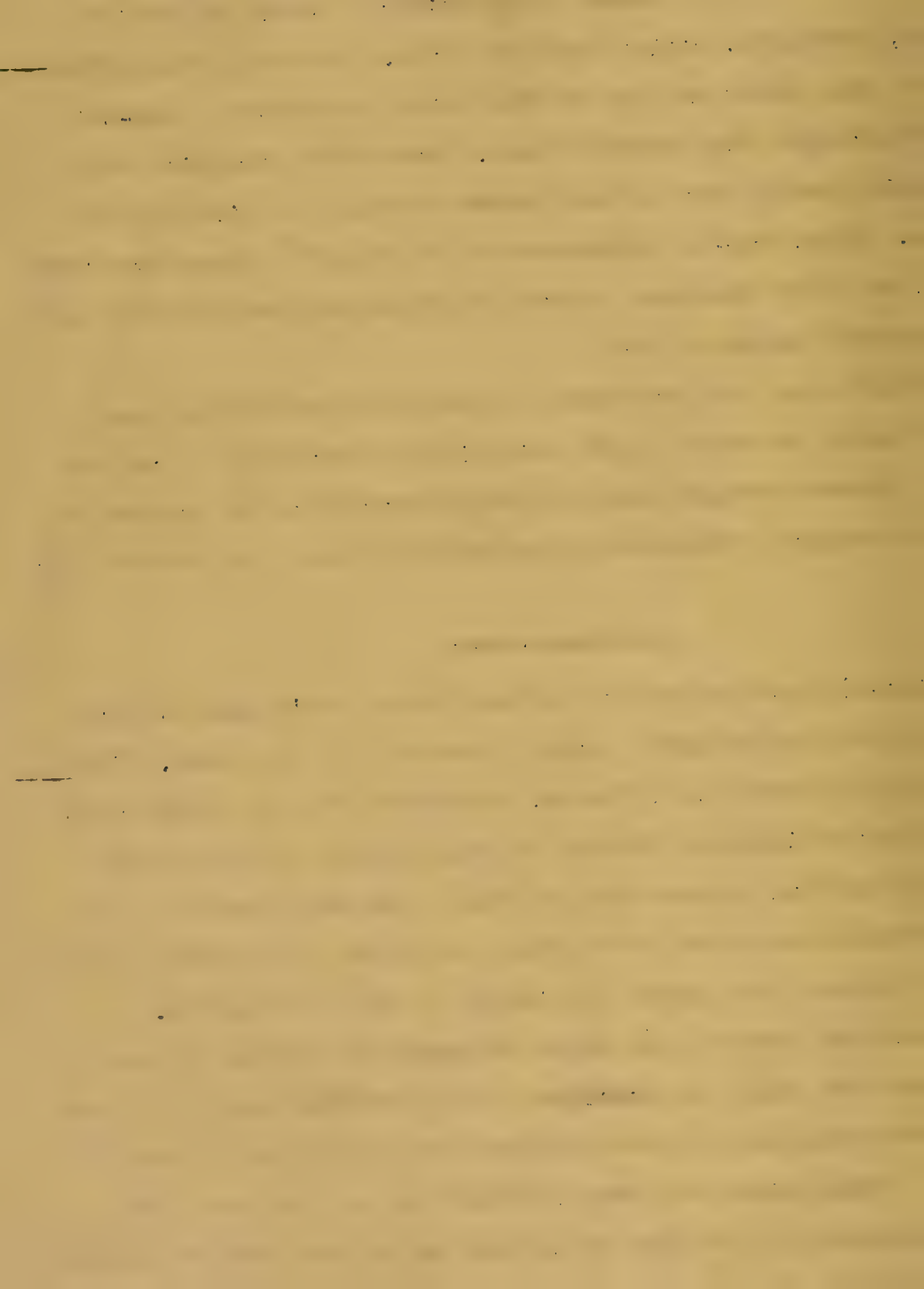
(1:10) Poultry meat production in 1943 will reach an all-time high if producers are able to carry through their present plans, according to L. E. Card, chief of the poultry division, University of Illinois College of Agriculture. In the North Central States, of which Illinois is roughly the center, the number of young chickens on farms is just about double the ten-year average. And as for turkeys, most turkey breeders report their supply of poults sold out for the season---in fact they have been for weeks.

In addition to the large farm production, Card says, there are tremendous numbers of chicks being raised in towns and cities--in garages, basements, attics and back yards. Especially significant is the fact that about one out of every five purchasers of day-old chicks never bought baby chicks before. Beginner's luck will see many of them through, but to some others it will be a disappointing experience. Fifty day-old chicks require very little space, but those same fifty at fryer size need perhaps ten times as much room and will eat a surprising amount of feed.

Card urges all poultrymen to save feed through the year by preventing waste, by using liquid skim milk or buttermilk to replace commercial protein concentrates, by making maximum use of pasture and by storing a supply of high-quality alfalfa or clover hay for use next winter.

(1:10) Even the best of pasture forage won't maintain high milk production if we neglect plenty of water, salt and shade. This report comes to us from W. B. Nevens, professor of dairy cattle feeding, University of Illinois College of Agriculture. He goes on to say that too much sun reduces milk yields. When dairy cows are confined in pastures throughout hot spring and summer days without drinking water or shade, milk yields are likely to fall off rapidly.

Woodland pastures are often overrated as sources of feed simply because the shade and sometimes also a constant supply of good drinking water furnished by these pastures are beneficial to cows in hot weather. When dairy cows have no access to water or shade the best use of pasture on hot days can be made by keeping cows on pasture at night and during the early part of the forenoon, moving them for the remainder of the day to a shady location where water and salt are available.



Good well water is best for dairy cows. Avoid stagnant ponds and dirty or disease-carrying streams. Cows at pasture need a constant supply of pure salt, too. Providing salt only once a week is not sufficient for milk cows.

Nevens adds that heavy spraying with fly sprays may produce such a thick coating on the hair that cows have difficulty in keeping cool. Use just enough fly spray to do the job.

(1:00) As you know, a large number of city boys between the ages of 15 and 17 years of age have volunteered to go onto farms this summer and help with farm work. These boys may be making a financial sacrifice to do this, for city wages are much higher than farm wages. But they're glad to do it. Of course, they'll need sympathetic guidance, patient teaching and an opportunity to do work suited to their strength and maturity.

According to P. E. Johnston, state supervisor, emergency farm labor, the Extension Service in Agriculture and Home Economics, University of Illinois College of Agriculture, will try to place at least four of these boys in each township of the labor-deficit counties of Illinois in 1943.

Farms must be carefully selected. You're being paid a compliment if you're asked to take one of these volunteers into your home and onto your farm for training. You'll find, too, that you've been given a real lift not only in your 1943 farm work but also toward solving your 1944 farm labor problems. These boys will make even better farm hands next year.

If you're willing to help in this program, Johnston urges that you get in touch with your farm or home adviser.



(:35) Due to poor honey flow conditions in 1942, hundreds of bee colonies had starved or were near that point after a long hard winter, according to V. G. Milum, assistant professor of entomology, University of Illinois. Now, Nature has refused to cooperate again by giving an extensive period of unfavorable weather right in the middle of the dandelion and fruit bloom period when the bees' pantry should have been replenished. This dearth will continue until the blooming of clover. In the meantime, feeding may be necessary to prevent starvation. Beekeepers may secure 10 pounds of sugar for each colony for feeding bees in 1943, but it should not be used now unless necessary because there is no assurance of a further supply this year.

(:30) Hats off to Illinois 4-H club members! They've bought and paid for an ambulance which will be presented to the army on May 31 at the University of Illinois College of Agriculture in Urbana, according to Ralph Taylor, 4-H club specialist in charge. At that time the 4-H club plaque will be attached to the ambulance. Illinois 4-H club members are the first state group to purchase an ambulance and give it to the armed forces. Donations have been received from all parts of the state, and while the goal has been reached, Taylor says it doesn't mean that club contributions should cease. Any additional money that comes in will be used to purchase overseas kits to be added to the ambulance.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

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FORTIETH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 6:40 minutes

May 20, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:15) Illinois corn yields may be cut 25 to 50 per cent if no steps are taken to combat the corn borer, according to W. P. Flint, chief entomologist of the Illinois State Natural History Survey and the Agricultural Experiment Station. He points out that the borer increased more rapidly in Illinois a year ago than it has in any similar area in the United States since it became established in this country. There were more borers in some of the northwestern counties in January 1943 than there were on the east side of the state a year earlier. Over the entire area of some of the eastern counties the number of borers in hibernation runs as high as 15,000 to 24,000 an acre of cornstalks.

Losses can be sharply reduced, Flint states, without adding much, if anything, to production costs. Three simple practices to follow include using the best adapted resistant hybrids, avoiding early planting on highly fertile soils and practicing clean farming. Avoiding early planting does not mean to plant late, however. It means to plant during the middle or latter part of the usual planting period. As for practicing clean farming, we must have plowed under as completely as possible all cornstalks and plant refuse by May 1.

The corn borer situation for 1943 is discussed further in a new 12-page leaflet by the same name, circular number 555. A copy will

be sent you free on request. Just drop me a card, _____, care of _____ and I'll see/you receive your copy right away. You may call for it by name or number, "The Corn-Borer Situation for 1943," circular 5-5-5.

(1:00) Uncle Sam has asked Illinois poultrymen for about 203 million dozen eggs this year. That doesn't mean much to a lot of us until we put them in thirty dozen egg cases and string them out from New York to San Francisco with the last few egg cases on each end of the string sticking out in the ocean. But, anyway, it's an awful lot of eggs which all adds up to the fact we're going to need to follow the practices of better Illinois poultrymen, if we expect to reach the egg goals outlined for us this year.

Here's what these better Illinois egg producers are doing, according to L. E. Card, chief of the poultry division, University of Illinois College of Agriculture. They gather their eggs about twice a day in cool weather and more often when it's warm. They use wire baskets instead of pails or buckets. Eggs are kept in a cool place and marketed often so there won't be any danger of spoilage. The cracked eggs and small ones are kept for home use. A dry material, such as steel wool, sandpaper or wire brushes, is used to clean dirty eggs instead of washing them. Eggs are graded according to color, shape and size. And in packing eggs, the small end's always down in the egg case, too.

It's poultrymen like these who will help "to see Uncle Sam through" with the extra eggs he's calling for this year.

(1:10) Let's look at a few questions from Illinois farmers and the answers from staff members of the University of Illinois College of Agriculture.

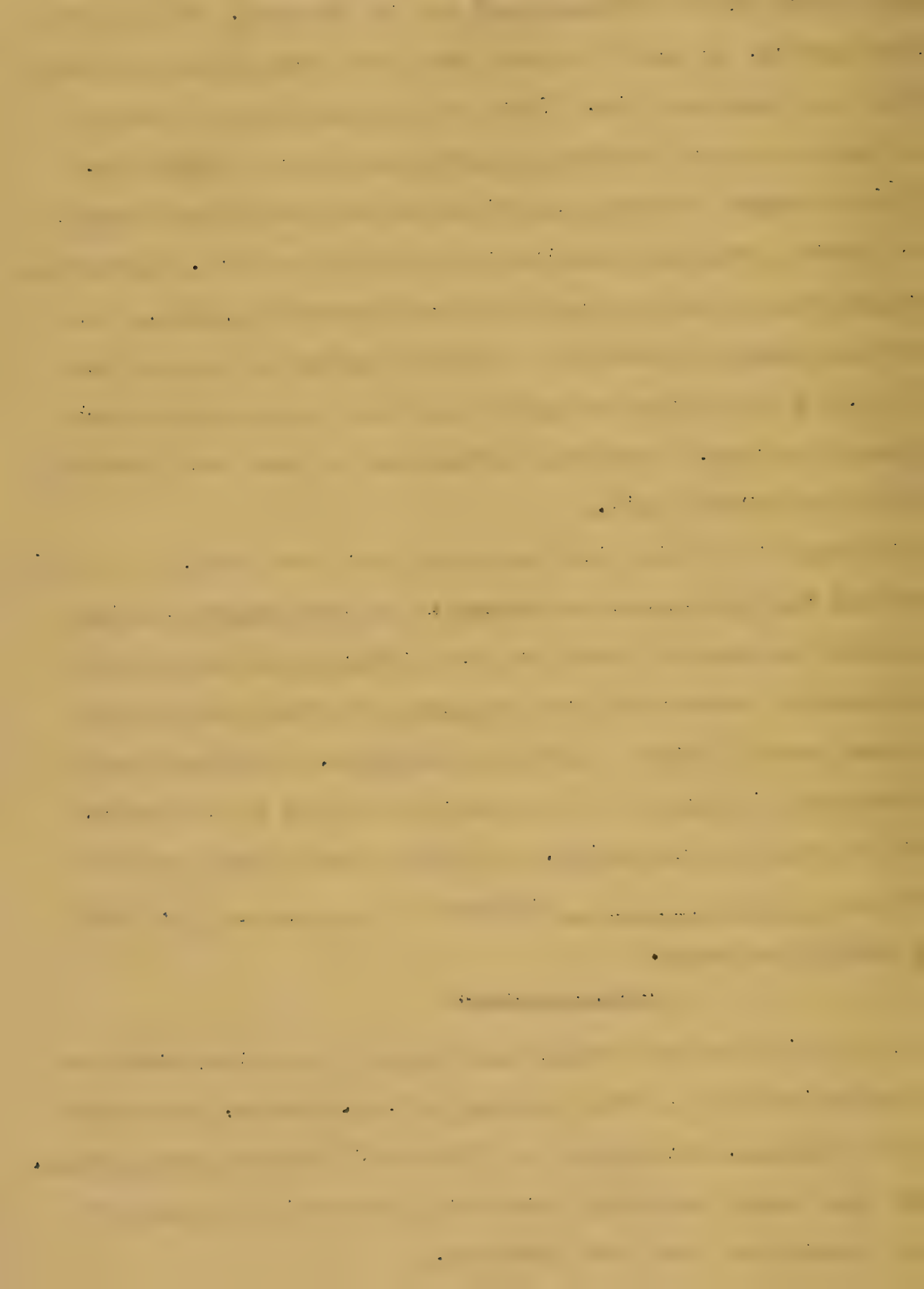
Here's one typical of a great many received. This party wants to know where edible soybean seed can be obtained. Well, it's scarce. Furthermore, we can't do much about the seed situation this year. But we can consider this. There's a possibility of saving a little seed for next year instead of eating all we grow this year.

We're always receiving questions on the best time to apply limestone so that clover will receive the greatest benefit. Limestone should be applied at least six months before clover is seeded. For example, for next year's clover the limestone should be applied this summer or fall. A good place to apply limestone is on ground which has been plowed for corn. Here the cultivation of corn will work the limestone into the surface soil.

It looks as if this will be a good year for weeds. So here's another from the list of questions coming in on weed identification. This person wants to know if there are any publications which will help him to identify weeds so he can recognize the bad ones on his farm. You know, many of these weeds are poisonous. Well, we have a publication showing pictures of 40 of the worst weeds in the state. This booklet is free for the asking. If you'd like a copy, address your request to _____ in care of _____. Just ask for the booklet on weeds.

(1:00) It's the wise farmer who plans to grow temporary hay and pasture crops in 1943, in the opinion of W. B. Nevens, professor of dairy cattle feeding, University of Illinois College of Agriculture. He points out that every available acre this year will be needed to meet the huge demand for feed for livestock.

Temporary pastures provide protein at a low cost, maintain feed supplies throughout the entire pasture season and act as insurance



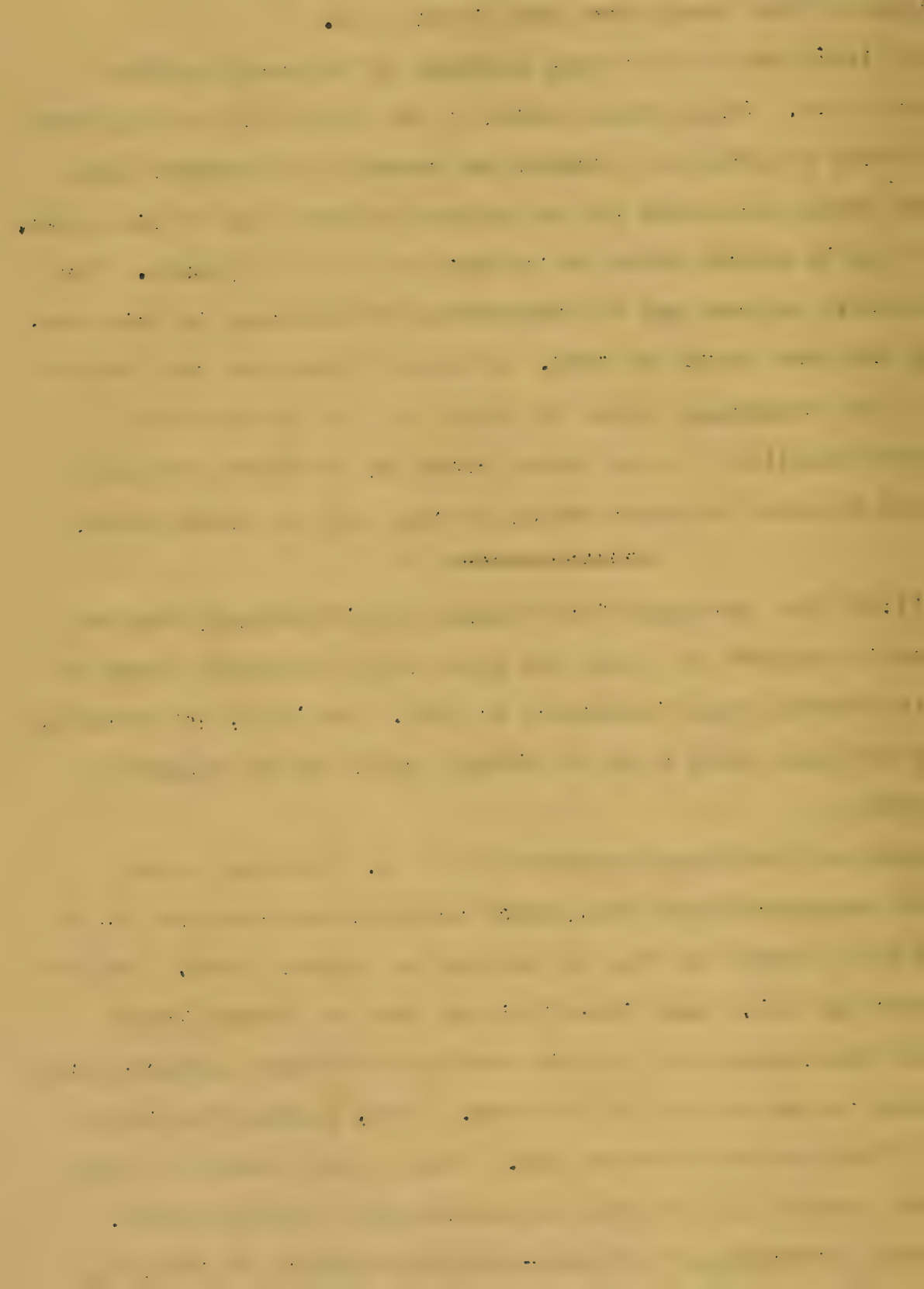
against drought or other crop damage. These same crops may be used to provide silage or dry forage for next winter, too.

It isn't too late to make seedings of temporary pasture crops, Nevens says. Sudan grass seeded at the rate of 20 to 25 pounds to the acre with a bushel to a bushel and one-half of soybeans makes an excellent forage crop that can be pastured within four to six weeks. Sudan grass can be seeded alone at the rate of 25 to 30 pounds. For southern Illinois cowpeas may be substituted for soybeans in this mixture, using the same amount of seed. If seeded alone for hay, cowpeas are usually sown broadcast, using 90 pounds of seed to the acre.

Seed supplies of some forage crops may be short, but most dairymen will be able to obtain enough to take care of their needs.

(1:10) The old adage "if a worker hasn't learned, the instructor hasn't taught" is a good one to be kept in mind by those who will be using Victory Farm Volunteers in 1943. You know, job training in industry has been given a lot of thought which can be applied to farm work, too.

Here are four steps suggested by P. E. Johnston, state supervisor of emergency farm labor, which are applicable to the 15- to 17-year-old boy or girl who will be helping on farms in 1943. Prepare the worker for the job, that is---find out what he already knows about it, get him interested, get his complete attention and get him in a position where he can see you do the work. Next, present the job to the worker. Tell him and show him how. Take up one point at a time, stressing key points, and remember to mention safe working habits. Third, try out performance, that is---have him actually do the job, telling you and showing you how to do it. Let him explain the key points. Make sure to ask questions and correct errors. Last of all,



follow up your instructions. Put him on his own---let him know he's responsible for doing the job. Advise him clearly what to do in emergencies. Check his work, too, and make certain he's doing it right.

Credit for success or blame for the failure of an untrained worker can be laid to the kind of instruction he is given. Just remember, if the worker hasn't learned, the instructor hasn't taught.

(1:05) Gardeners who enter their gardens in competition with others benefit most, in the opinion of Lee Somers, associate in vegetable crops, University of Illinois College of Agriculture. In this way, Somers says, gardeners gain recognition for their ability to plan, to carry out good practices and to work efficiently and skillfully. Equally important, they become aware of and are in position to correct errors of judgment, poor practice and inefficient and unskillful workmanship.

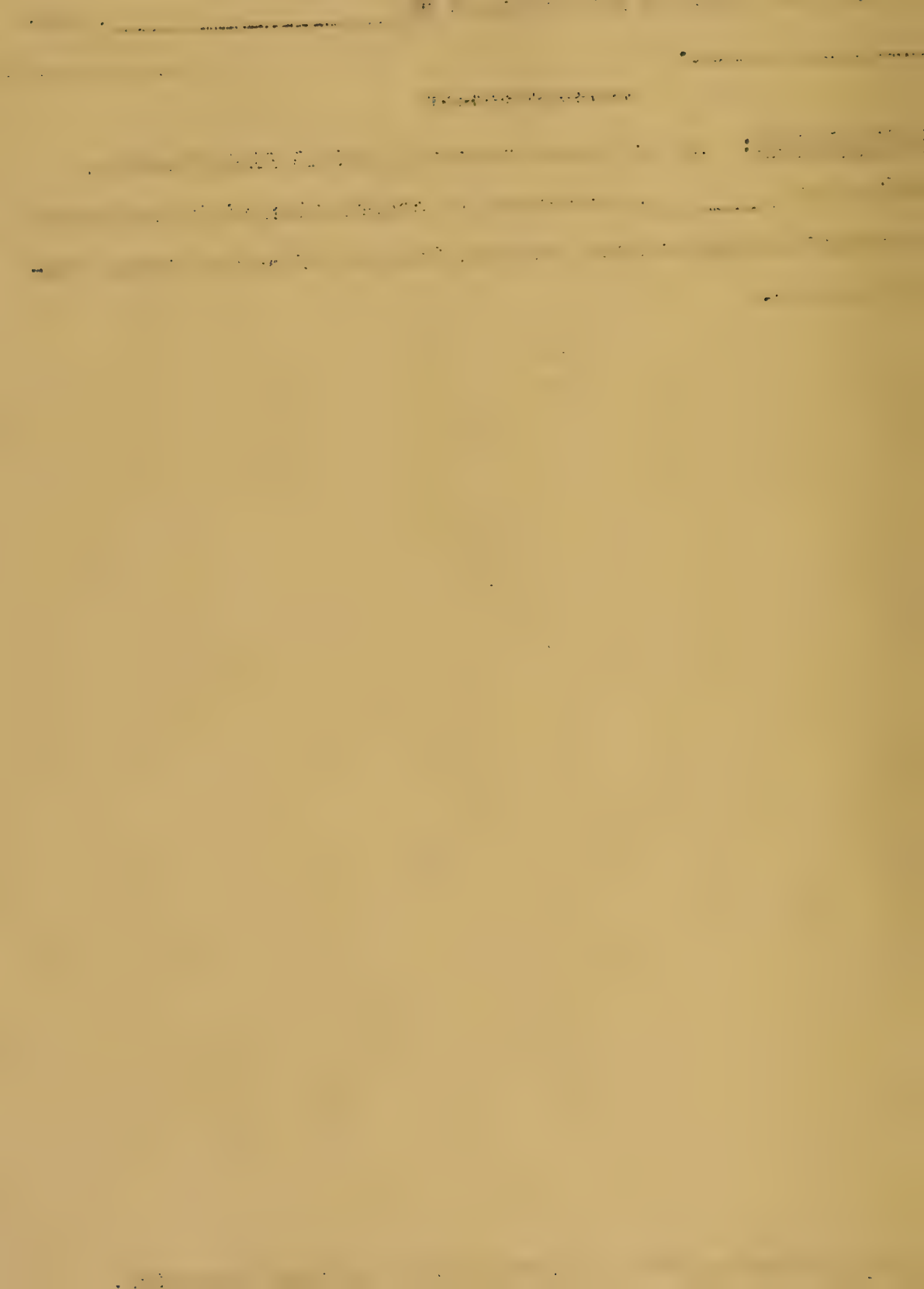
If you're being called upon to judge the gardens in your block or your town, you'll be interested in the four-page leaflet prepared by Mr. Somers on judging victory gardens. In fact, if your garden will be entered in competition with others this year, you may want a copy of this leaflet so you can get a better idea just how your garden will be judged. This leaflet, which is free for the asking, tells when to judge the victory garden, discusses the qualification of judges, instruction for them and their responsibilities. It lists the types and classes of victory gardens which can be grouped for judging as well as the method for making awards. It also contains a score card for judging based on the plan, timeliness of planting, condition of the garden and workmanship.



Copies of Judging Victory Gardens are available for free distribution. Just address your request to _____, care of _____.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914



FORTY-FIRST
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture in cooperation with
(U. S. Department of Agriculture

Speaking time: 7:05 minutes

May 24, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture.)

(:30) Don't sit under the apple tree with anyone else or by yourself during an electric storm. That goes for all lone trees, because they seem to attract lightning more than do trees in a forest. It's good business to put off telephoning until after the storm, not during it. You know, we can't be too careful when lightning flashes. Stay away from wire fences during electric storms, too. Ground wires on fences and telephone lines and lightning arresters on radios make them safer. Lightning plays rough and it plays for "keeps." Let's not take any chances with it.

(1:30) We have a report here from J. G. Cash, dairy extension specialist of the University of Illinois College of Agriculture, on butterfat production records in the dairy herd improvement association during April.

Stephenson No. 2 led all others in the state with an average of 34.1 pounds a cow. The state average was 28.7 pounds. Delmar Masters is tester for the association. There are 535 cows in 21 herds in this association.

The herd owned by Lester Follmer, of Graymont, in Livingston county, topped individual herd production for the same period with an

average of 47.7 pounds a cow. He has a herd of eight registered Holsteins.

Other leading herds among the first 10 were: nine purebred and grade Holsteins of Gotthold Tanner, Morton, Tazewell No. 1, 47.4 pounds; 18 purebred Guernseys of Corn Blossom Farm, Arlington Heights, Cook, 47.2; 16 purebred and grade Jerseys of Lloyd Elson, Windsor, Coles, 46.3; nine purebred and grade Jerseys of Paul Franklin, Farmer City, DeWitt-Piatt, 45.9; 22 purebred and grade Holsteins of Raymond Wittenborn, Sparta, St. Clair-Monroe-Randolph, 45.8; 14 grade Holsteins and grade Guernseys of Holand and Pratt, Thornson, Carroll, 45.6; 11 purebred Holsteins of Ed Hentz, Greenville, Madison, 45.5; 13 purebred Holsteins of Walter Taylor, Hanna City, Peoria, 44.6; and 12 purebred and grade Guernseys of E. J. F. Nelson, Paxton, Ford, 44.3.

(1:30) Here's a little survey I picked up from P. E.

Johnston, state supervisor of emergency farm labor, on Victory Farm Volunteers. You know, they're the young boys and girls from the city who will be helping Illinois farmers this year to solve some labor problems. If you're wondering whether or not you'd like to use some of these boys or girls on your farm this year, here are some things you might like to know.

Five hundred and fifty boys and 76 girls, mostly from large cities, worked on Vermont and New Hampshire farms the past summer. Four hundred boys and 71 girls completed their work satisfactorily. That's more than 80 per cent completion, a mighty fine record.

Farmers who employed these boys and girls had a chance to make a report on them. Here are the questions, together with the answers, farmers gave. Were you satisfied with the recruit as a person? One hundred eighty-four said "yes," 18 said "no." Were you

satisfied with the recruit as a worker? One hundred fifty-eight answered "yes," 34 said "no," and 10 were partially satisfied. Was the recruit worth the expense and trouble? One hundred sixty-six said "yes," 19, "no," and 13, "partially." Another question: Did your young workers help in your farm production? One hundred seventy-nine answered in the affirmative, 12 said "no," and 10 answered, "partially." The final question asked these farmers was: "Would you take a recruit next year if you needed help?" One hundred eighty-three answered "yes," 7 said "no," and 11 said "yes, on certain conditions."

Such a survey speaks well for city boys and girls of the Victory Farm Volunteers. If you're interested in using some of them, get in touch with your farm adviser or write this station.

(1:15) Now for questions and answers. The questions come from Illinois swine growers and the answers from B. W. Fairbanks, chief of the swine division, University of Illinois College of Agriculture.

This first party states he's feeding a mixture of ground corn and soybean meal to growing-fattening pigs on clover pasture. What kind of mineral supplement should he feed, if any? Well, it's that old question of minerals again. And Fairbanks says we must feed some simple mineral mixture, such as limestone, two parts; steamed bone meal, two parts, and salt, one part. Since bone meal is difficult to get, use defluorinated products when and if they become available.

In question number two this person says he had 100 pigs for 10 acres of excellent red clover pasture. Since it's difficult to get protein feeds, he wants to know when he can quit feeding protein

supplement on pasture and produce pork economically. Well, if excellent pasture is available, supplements may be discontinued when the pigs reach 75 pounds. If pasture is average, the pigs should reach 125 pounds before protein supplements are discontinued. Further information is contained in a new leaflet called "Priorities for Protein in Animal Production." If you'd like a copy, address your request to _____, care of _____, and I'll see that you receive it right away. Ask for the leaflet on proteins for pigs.

Finally, this farmer wants to know how many growing-fattening pigs can be fed on a 10-door self-feeder. Fairbanks has no accurate figures, but states that they have run four to five growing-fattening pigs to each door with apparent success. Forty or fifty pigs, in other words, would be about right for this man's feeder.

(1:00) Avoid using tobacco when handling tomato plants, is the word of caution coming to us today from M. B. Linn, extension vegetable pathologist, University of Illinois College of Agriculture. Tomato growers, whether they're commercial growers or home gardeners, may unintentionally sabotage their crop if they use tobacco when handling tomato plants. It has been known for a good many years that the common tomato mosaic disease, which may cause severe reduction in tomato yields, occurs also on tobacco plants growing in commercial fields in the south. The virus causing the mosaic disease ordinarily isn't killed when the tobacco is processed. Since the virus is transmitted easily by contact, any person using tobacco when handling tomato plants is likely to inoculate his tomatoes with the mosaic virus juice if the tobacco juice or moistened tobacco gets on his hands.

If a few plants should become infected accidentally with the mosaic virus, there's a good chance that the virus may be spread



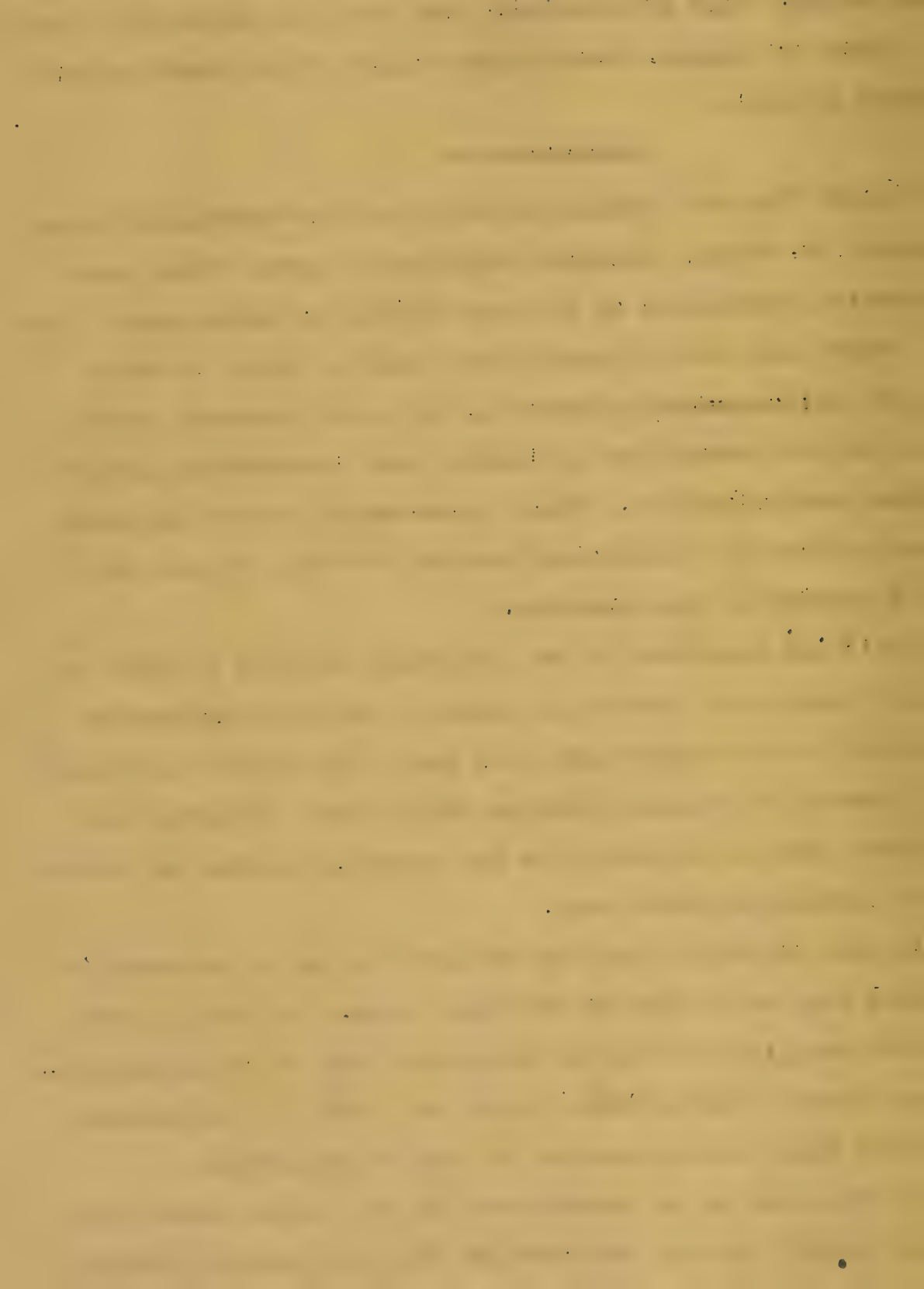
from plant to plant in a row on gardening tools. For this reason, growers should use extreme caution to avoid touching the plants when plowing or hoeing. This is especially true when the plants are young. When the plants are larger, there's less danger of the mosaic causing much decrease in yield.

(1:20) "Cut the corners and help meet the shortage of farm labor," says J. E. Wills, assistant professor of agricultural economics extension, University of Illinois College of Agriculture. However, such short cuts must be made after a careful study of operations and not a hit-and-miss proposition. In every community there are farmers who have worked out a simpler, more labor-saving method of doing some particular job. These labor-saving methods are being observed and studied by neighboring farmers, and some of them are being widely adopted in the community.

Let's ask ourselves if the job really needs to be done, or if it can be eliminated. What would happen if it were eliminated? Over a period of years farmers have done away with certain operations which were formerly a standard practice, Wills says. Reducing the number of times corn is cultivated is one example. Another is feeding shelled corn instead of ground corn.

Another question to ask is whether jobs can be combined to save labor and make better use of available power. Pulling a harrow section behind the plow or a harrow behind the disk is a common practice on many farms. Pulling both a disk and a drill at one operation is another labor-saving practice in soybean production.

Can the same end be accomplished by some other method that requires less labor? Disking the land may take the place of plowing, or harrowing may take the place of cultivation. Substituting self-



feeding for hand-feeding and growing hogs or cattle on pasture are other examples. Many Illinois farmers are doing these things to get high production with a minimum of work.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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FORTY-SECOND

ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 6 minutes

May 27, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture.)

(:30) There's a rumor making the rounds that "them gremlins" have been paying a visit to Illinois farmers. You know, they're the ones who leave a hammer, an oil can or perhaps a few nails on the haymow stairs. Sometimes it's spilled grain---another good way to get the skids put to you. In other instances, they've taken the railing off the basement stairs or perhaps removed a rung from the ladder. Keeping tools in a box, sweeping the stairs clean and repairing broken steps and ladders are the best ways to put these "gremlins" on the run. Fifteen minutes spent in attending to such things now may save us years of pain and grief later.

(1:30) "Spare the twine and save the harvest," says R. I. Shawl, agricultural engineer, University of Illinois College of Agriculture. And that goes for rope, too, he adds. You see, this rope and twine situation is "a little tight," so let's look at some of the suggestions Shawl has to offer pertaining to how we might relieve some of the strain.

Twine is made from scarce material. Use it only on mechanical binding equipment. Keep all points on binding machines through which the twine passes in best possible operating conditions. This

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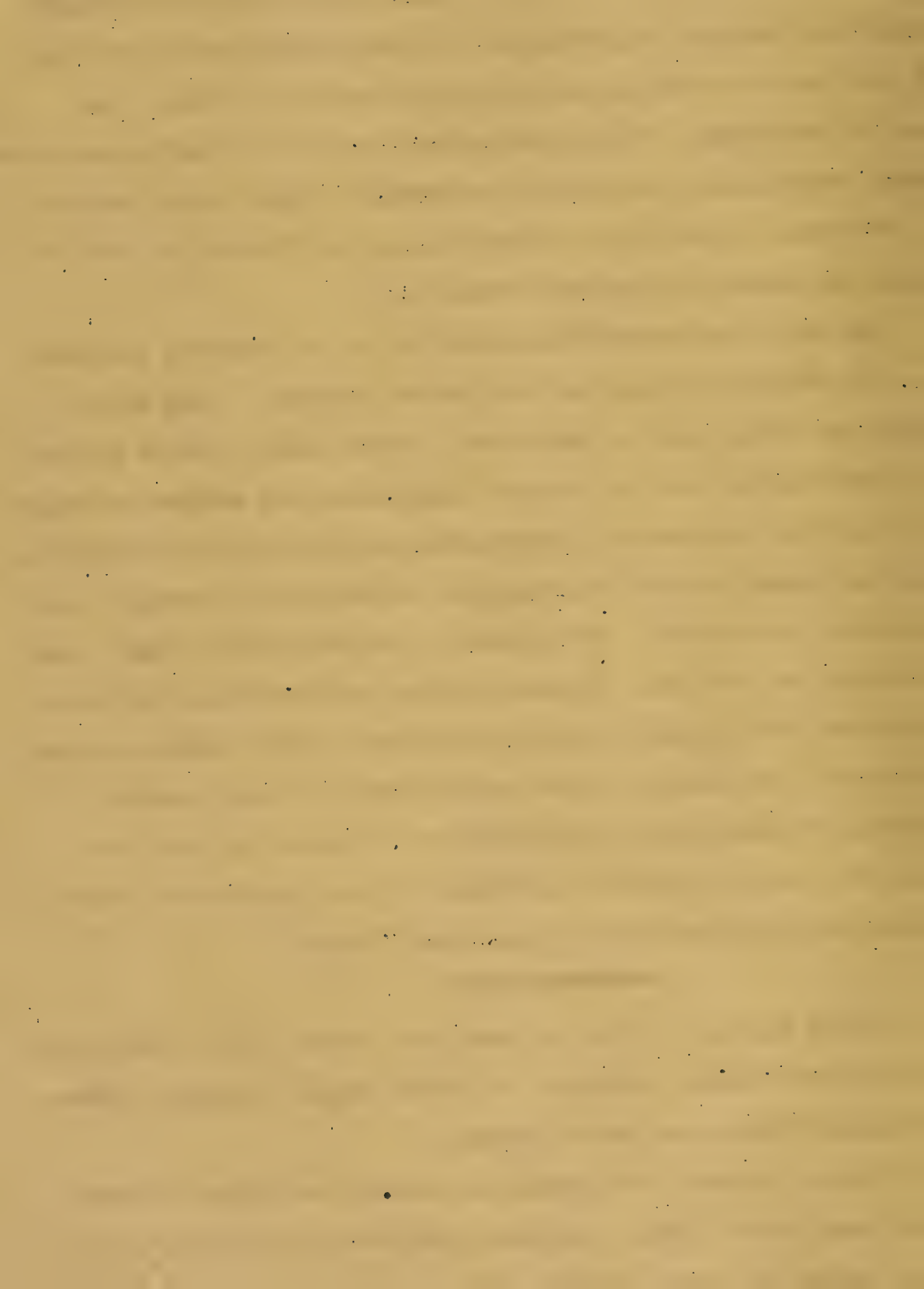
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means touching up or repairing worn needles and other eyes through which the twine passes, adjusting or replacing badly worn parts and weak or ineffective springs, keeping the cutter knife sharp or replacing if necessary. These precautions are particularly pertinent when using twine made of substitute materials. Tie larger bundles to use less twine. Take care of your twine, not leaving it out in the weather or where rats might destroy it.

As for rope, store it properly in a dry unheated building or room. It should be clean and dry before storing. Hang it in loose coils on a peg, not on the floor. Avoid kinks. Kinks pulled through a restricted space will shear the fibers and weaken the rope. Avoid leaving the rope where battery acid, drying coils and such can damage it, or where animals can chew it. Splices are stronger and easier on rope than knots. It's wise not to overload a rope. Use the right size for the job. Reverse a rope, end for end, that runs through pulleys and tackle to equalize the wear. Save wear on rope by reducing wear and abrasion that occurs when one rope chafes another, when it drags over sharp surfaces or picks up sand and grit when it's dragged over the ground. If you remember all these suggestions your rope will last a good deal longer.

(1:15) Now for a note on grass and legume silage for dairy cattle from W. B. Nevens, professor of dairy cattle feeding, University of Illinois College of Agriculture.

Storing grasses and legumes as silage has become a common practice on many dairy farms, you know. In fact, any of the more common farm crops, including wheat, oats, rye, millet, Sudan grass, alfalfa, clovers and soybeans may be successfully ensiled. Of course,



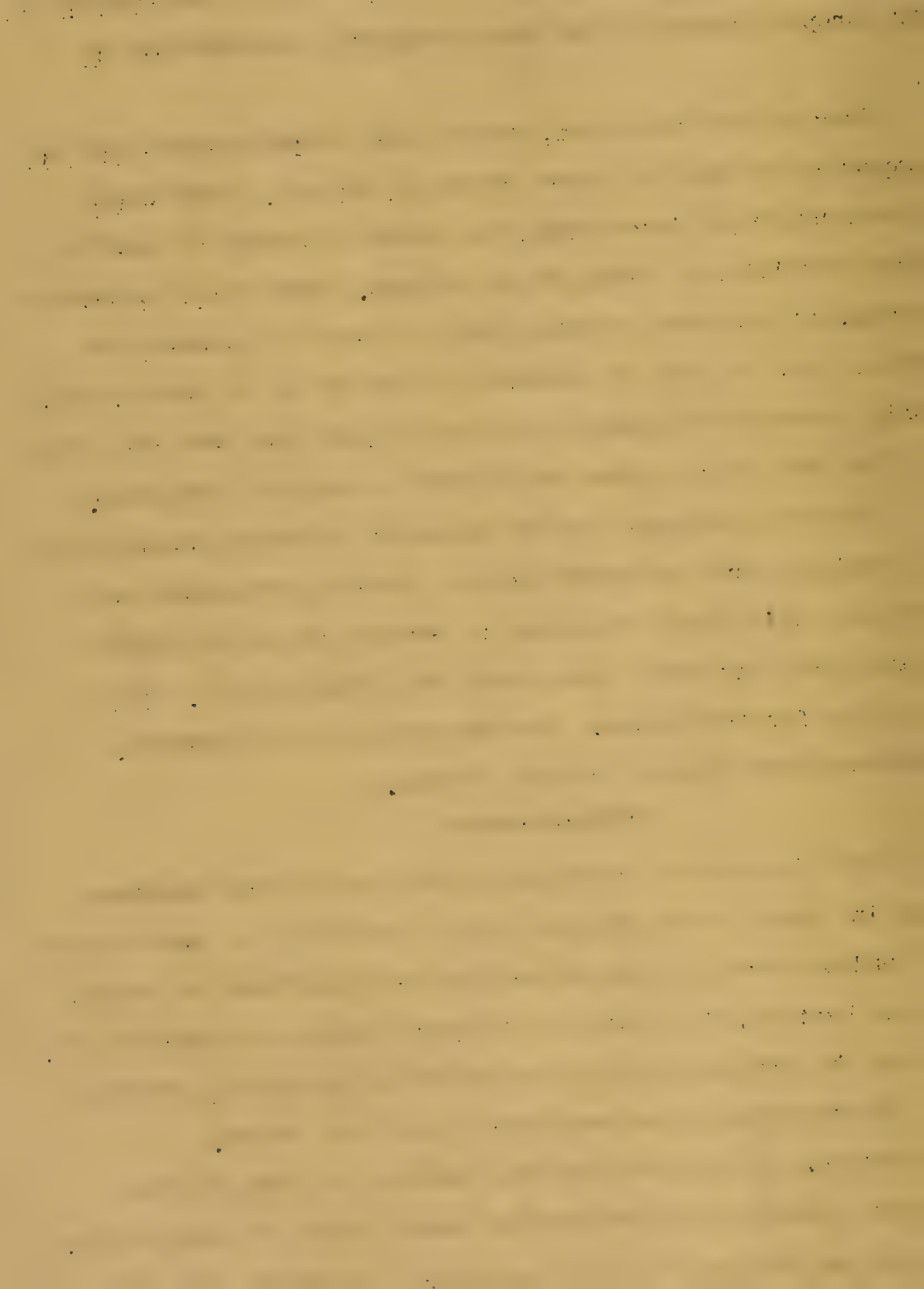
you'll need to give careful attention to the stage of development at which the crop is harvested and when a suitable preservative is added.

Even in the corn belt, Nevens says, dairy farmers find it advantageous to use some of these crops for silage. When rainy seasons prevent proper harvesting, the entire crop can be saved in first-class condition by using it for silage. Labor will be distributed throughout the year by substituting legumes or grasses for corn. Then, too, the cost of producing a ton of one of the biennial or perennial grasses or legume crops may be less than that of a ton of corn. Surplus pasture crops can always be saved by ensiling.

There's a six page leaflet prepared by Nevens which tells all about making legume and grass silage, listing advantages and disadvantages. This might be a year in which a lot of you folks would be interested in using some grass and legume silage. This leaflet is free for the asking. You may call for it by number, D-295. Address your request to this station.

(1:00) Livestock owners should be aware of the existence of blackleg in young cattle and take every precaution to guard against it. This word of caution comes to us from the department of animal pathology and hygiene, University of Illinois College of Agriculture. Germs causing the disease might be deposited in inundated, overflow pastures. Overcrowding of pastures may be another factor.

Contrary to popular opinion, blackleg in young cattle appears at any season of the year and may cause losses of cattle confined in barns as well as cattle on pasture. The onset of blackleg is sudden. A calf that looks well today may be a very sick animal tomorrow and dead in 24 hours. Often, the first symptom noticed is

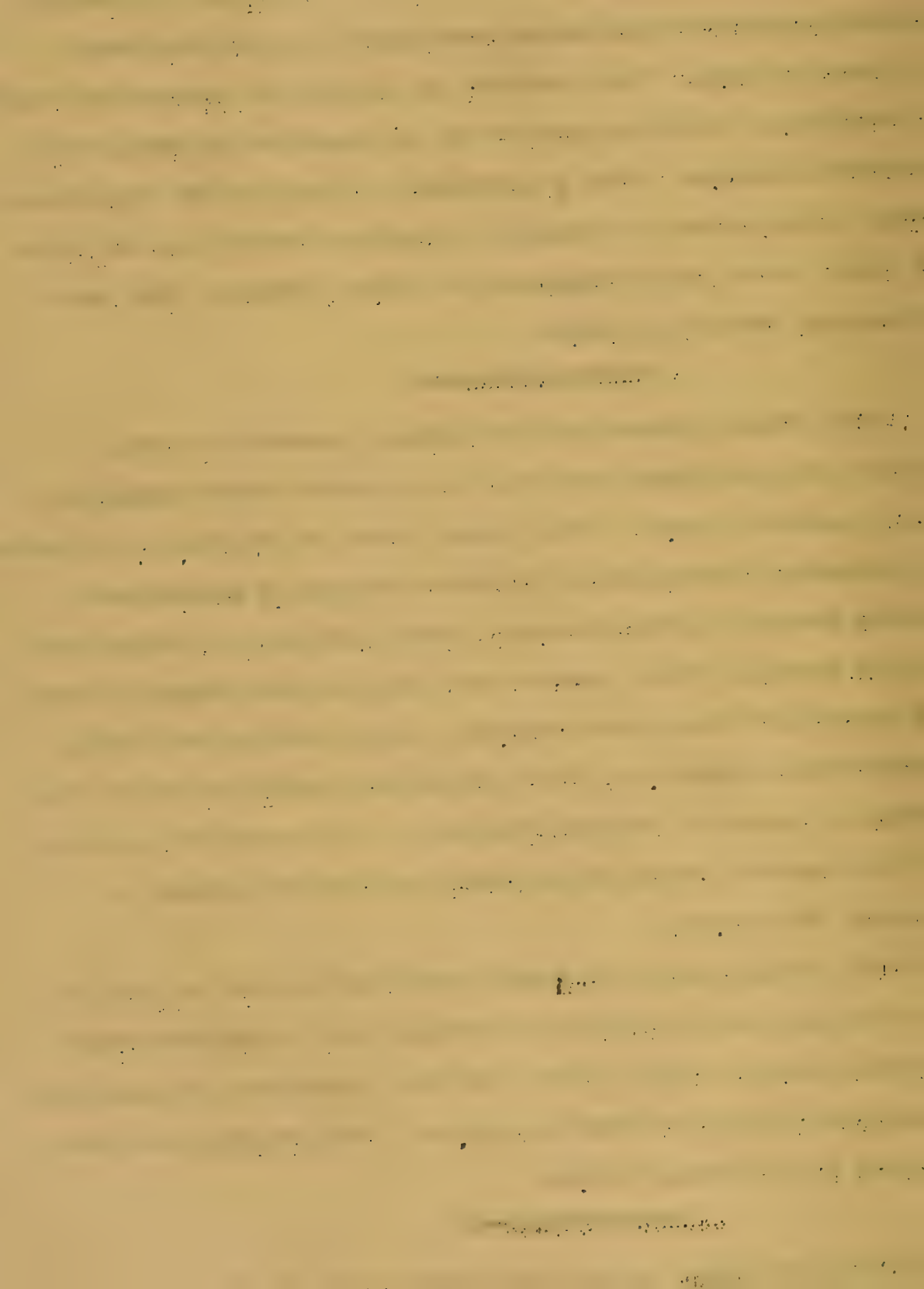


lameness or the affected calf is standing apart from the rest of the herd. Close examination may reveal swellings over the shoulders, hips or along the back. When pressure is applied by running the hand over the swellings, crackling sounds may be heard due to gas present in the diseased muscles. When a diagnosis of blackleg has been made, the healthy cattle should be changed to another pasture and all animals two years old or under vaccinated at once. Animals that have died of blackleg should be burned.

(:45) Fruit growers who have always depended on local manufacturers for containers are urged to estimate their needs and order their baskets at once. This report comes to us from J. E. Davis, extension forester, University of Illinois College of Agriculture and the State Natural History Survey. Davis adds that if orders can not be filled locally, fruit growers will want to take steps at once to secure containers from other regions. Early ordering will help manufacturers plan production. Part of our difficulty is due to the past practice of ordering baskets from day to day during the picking season so that manufacturers had no basis on which to produce a reserve during the winter.

Local manufacturers of fruit containers should be able to take care of needs for late fruit, if growers will anticipate their needs and order early. Davis points out that production of containers is averaging about fifty per cent of normal. Manufacturers will need plenty of time to fill their orders.

(1:00) The beans are getting a good start in the gardens and so are the bean leaf beetles, says H. B. Petty, extension entomologist, Illinois State Natural History Survey. Many small holes



are being eaten in the seedling leaves of the bean plants by these beetles. They're beetles about one-fourth inch long, three or four black marks on their backs and a black margin around their wings. They usually feed on the undersides of the leaves making them look as though they has been riddled by buckshot. The control is fairly simple and is effective.

Since they are chewing insects, a stomach poison should be used on them. The bean pods haven't started to form so it's all right so far as the human safety angle is concerned. The best material to use is calcium arsenate, one part, and hydrated lime, nine parts. Mix thoroughly and it's ready to go. If cryolite is available, you'll also find it an effective material in control. Mix this according to the directions on the package, usually one part of cryolite and four or five parts of a carrier such as flour.

One word of caution is not to use lead arsenate. Although this material is a good stomach poison it has a tendency to stunt bean plants and should by no means be used in the control of the bean leaf beetle.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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FORTY-THIRD
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture)

Speaking time: 7½ minutes

May 31, 1943

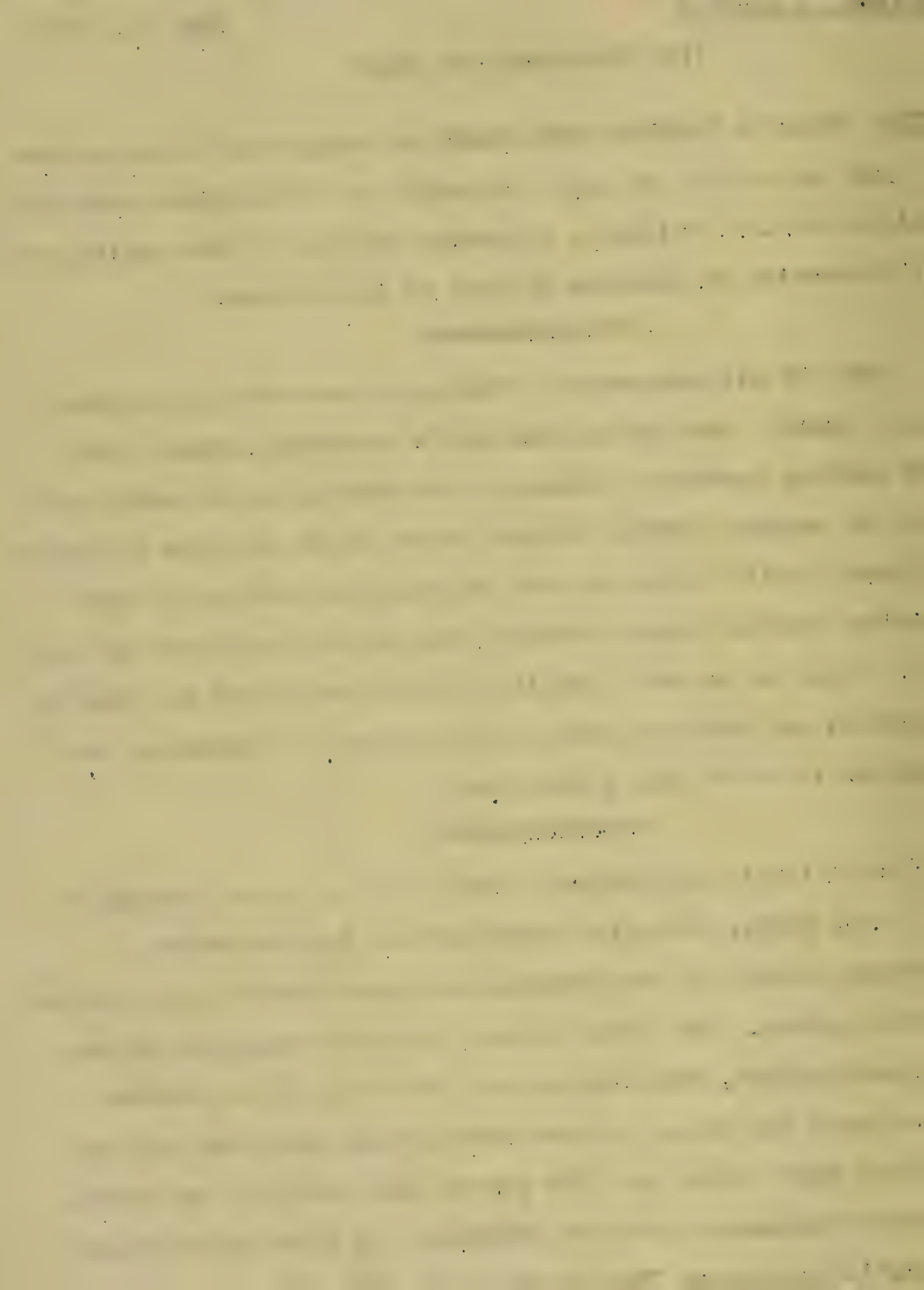
(FOR BROADCAST USE ONLY)

(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture.)

(:30) Of all sad words of tongue or pen---the handle came off the ax again. And ax handles aren't rationed, either. So instead of getting ourselves knocked in the head by an ax coming off the handle, or perhaps getting slivers in our hands or maybe splinters in our fingers, let's resolve to have at least one good ax on the place. You've heard of houses burning down while someone was looking for the ax. Keep the ax sharp and in a safe place so you can find it when you need it and also so nobody will walk on it. Remember, too, that a sharp ax is safer than a dull one.

(1:00) "Let's kill three 'birds' with one stone instead of two," says H. B. Petty, extension entomologist, Illinois State Natural History Survey, in commenting about insect control on potatoes in our victory garden. The three insects likely to cause us the most trouble are leafhoppers, flea beetles and Colorado potato beetles. Leafhoppers cause tip burn; in other words, they make your potatoes look as if they were drying up. The others chew holes in the leaves.

Petty recommends poisoned Bordeaux. (I never could understand why that's pronounced "Bor-dough" and spelled B-o-r-d-e-a-u-x.) Anyway, you can buy Bordeaux ready to mix at some florists, greenhouses and other places where insecticides are handled. You'll



probably have to poison it yourself, though, with a little lead arsenate. Read the directions on the package of Bordeaux and then add two ounces of lead arsenate to every three gallons of mixture. I'll repeat that. Read the directions on the package of Bordeaux and then add two ounces of lead arsenate to every three gallons of mixture.

Up until now we've always talked about dusting for insect control. But this material should be sprayed on your potatoes after they've reached a height of four or five inches. You really should apply this spray every week for four or five weeks. However, a dust can also be used to control these insects. For further information write for the free leaflet called Insecticides.

(1:00) More to produce and less to produce it with is the situation facing Illinois livestock producers, says W. E. Carroll, head of the animal husbandry department, University of Illinois College of Agriculture. However, the better livestock growers are meeting the situation in an efficient manner, and here's how.

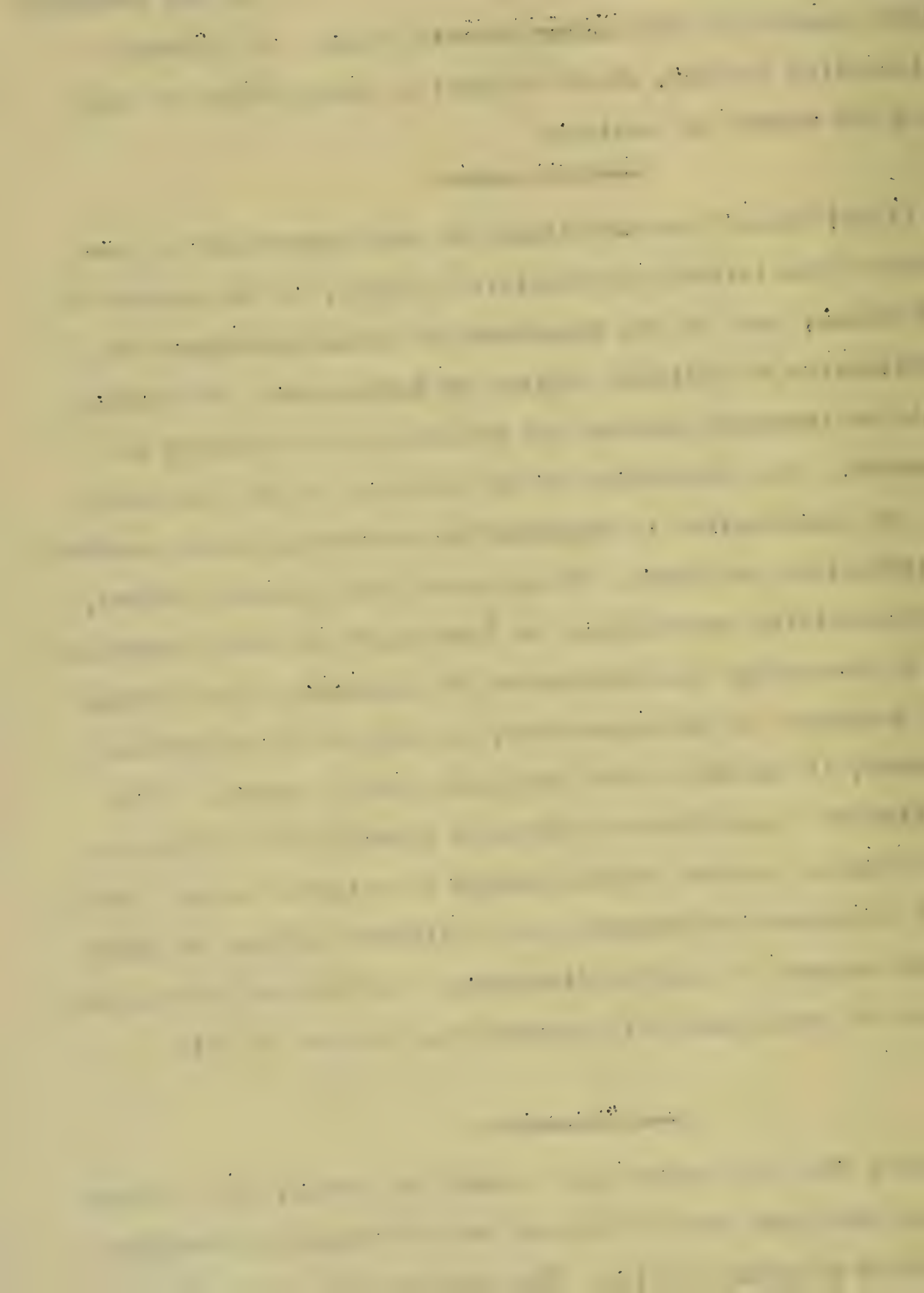
Many farmers who feed mixed rations get good results with a smaller proportion of high protein than they have fed in the past. Proteins are fed with other feedstuffs and only in amounts needed by livestock and poultry. In many cases where concentrates or straight high protein is being purchased to mix with home-grown feeds, these stockmen feed the same proportions of protein as the industry using in ready-mixed feeds.

Carroll points out that possibly the biggest opportunity for a greater economical use of high proteins is in feeding poultry, pigs and dairy cattle. However, beef cattle feeders, sheep growers and other livestock producers can also economize on protein foods by

using generous amounts of grain and good roughage whenever these are available. Good pastures, however, just now offer livestock producers the greatest opportunity for saving protein feeds. All classes of animals, including poultry, should be kept on good pasture as many days during the summer as possible.

(1:00) There's no substitute for good management in preventing losses from infectious enteritis in swine, in the opinion of Dr. Robert Graham, head of the department of animal pathology and hygiene, University of Illinois College of Agriculture. Of course, herds should be immunized against hog cholera as a supplement to good management. The elimination of hog cholera, as well as swine erysipelas by immunization is important in preventing losses associated with infectious enteritis. Clean ground and balanced rations, together with avoiding overfeeding, or "pressing" are also recognized as helpful in preventing the development of enteritis. Oats soaked in an alkaline compound, or sulfaguanidine, as well as the copper sulfate treatment, if utilized early may check severe losses. Under the supervision of a qualified veterinarian special sulfa drugs are available in limited amounts without charge in selected herds. These experimental treatments are supplied only following autopsy of typically affected animals to confirm diagnosis. For further information on the control of swine enteritis address your request to this station.

(1:00) With fly season just around the corner, let's glance at some of the practices better dairymen are following in preventing the contamination of milk by flies. This report comes to us from W. Yapp, professor of dairy cattle breeding, University of Illinois College of Agriculture.



First, these better dairymen prevent the breeding of flies by composting all manure and wet straw. Next, all milk rooms are screened to prevent flies from entering and in some instances electric screens are used to kill flies. A ceiling fan is placed above the milk can and strainer, since flies avoid a heavy breeze. Last of all, here's a regular and periodic killing of flies in the barn, milk house and such by using a good contact spray.

As you know, flies can transmit a number of human diseases. They may carry typhoid fever, tuberculosis, Bubonic plague, gangrene and have been recently found to carry poliomyelitis or infantile paralysis. For this reason better dairymen everywhere are protecting consumers from the dangers of getting milk contaminated by flies. At the same time, they are guarding against any possibility of a decrease in milk production caused by flies.

(1:15) Here's a follow-up on this matter of grass and legume silage I told you about the other day. Incidentally, if you don't have a copy of that leaflet D-295 on making grass and legume silage for dairy cattle, be sure to send for your free copy right away. Today we're going to talk about preservatives.

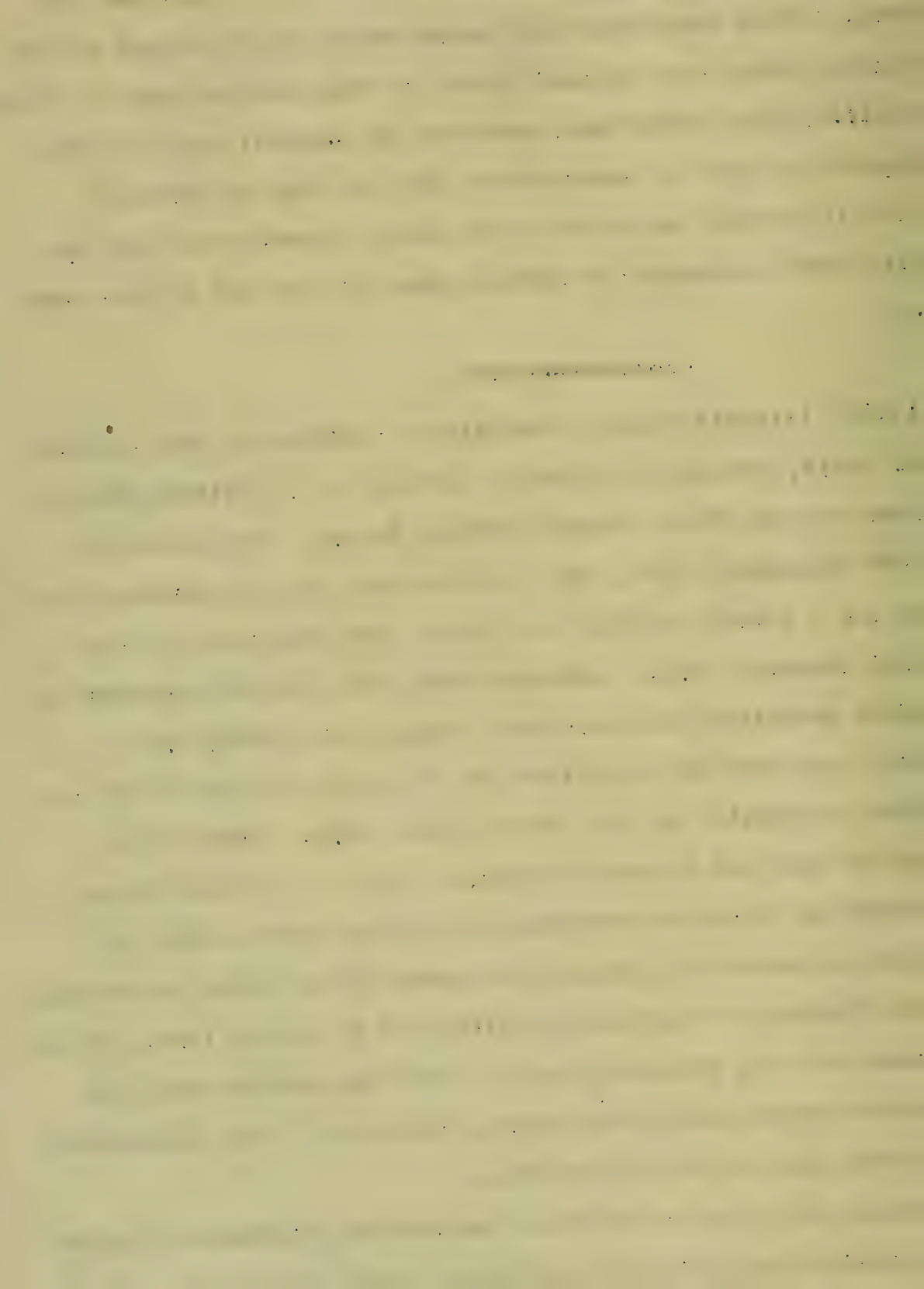
W. B. Nevens, professor of dairy cattle feeding, University of Illinois College of Agriculture, says that molasses is considered the best preservative for use in making silage from grasses and legumes. However, he points out that supplies of both cane molasses and corn molasses are very short. But another successful preservative that can be used consists of 200 to 250 pounds of ground shelled corn or ground ear corn for each ton of green crop. The ground corn may be added to the crop as it goes through the silo filler or may be sprinkled on the top as it is spread in the silo. Fine grinding of corn is recommended.

Attention should be called, however, to the fact that the amount of corn required is four to five bushels of corn for each ton of green crop. Since some grass and legume crops yield as much as six to eight tons of green crop an acre (this is true particularly of first-cutting alfalfa), this means that one-third to one-half acre of corn must be grown to be used as preservative for one acre of grass or legumes. So, if weather is suitable for making these crops into hay, it is usually more economical to harvest them for hay and to grow corn for silage.

(1:45) Illinois lumber production is critically low, according to J. E. Davis, extension forester, University of Illinois College of Agriculture and the State Natural History Survey. Production in this state for September, 1942, was a little more than 13 million board feet. There was a steady decline to a little more than six million board feet for January, 1943. Although there was a slight recovery in February, March production dropped back to near the January low.

Labor and weather conditions are the major factors which have affected lumber production in this state, Davis adds. Many of the smaller sawmills have had to stop operation. While a few may reopen when bottomlands are in better condition late this summer, most of these mills are permanently closed. Both sawmills and other wood-using industries are finding it increasingly difficult to obtain logs. Recent conditions have made the situation worse, since the veneers used for egg cases, fruit and vegetable containers, ammunition boxes and similar products are made from bottomland species.

Farmers are urged to use only the absolute minimum of lumber necessary to maintain an efficient operating plant. This applies to both native lumber and yard lumber. Needs must be anticipated as far in advance as possible. Steps can be taken to obtain supplies of all

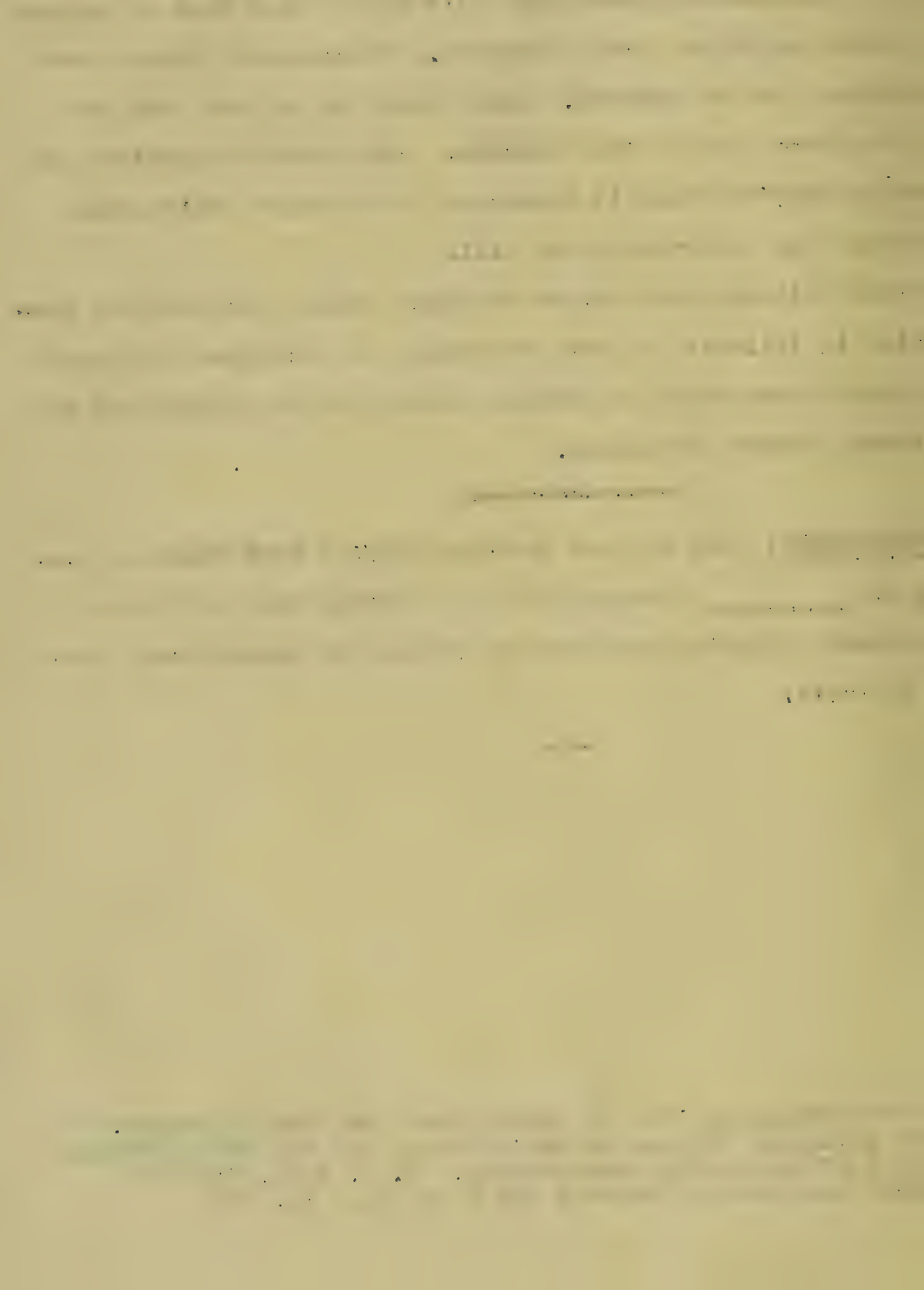


forest products as soon as needs are determined. This procedure will not only help the lumber situation, but will also help to prevent interference with agricultural production. It's also a wise move to salvage and reuse lumber and other forest products. Merchantable timber from the farm woodland can be marketed. Logs should be cut and sold delivered at the sawmill or at the roadside. Some sawmill operators are so short-handed they've found it necessary to alternate their crews between cutting logs and running the mill.

Davis believes that unless woodland owners will consider forest production in Illinois as part of farming and will give the woodland its proportionate share of farming effort, we can hardly hope to return to normal lumber production.

LOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture, and the United States
Department of Agriculture cooperating. E. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914



FORTY-FOURTH
ILLINOIS FARM FLASH(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
(U. S. Department of AgricultureSpeaking time: 6 minutes

June 3, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture.)

(:25) It's generally agreed that the most beautiful word in the English language is "cellar-door." But if it's located on the back porch and left open, it certainly can be an awful mess. You may walk into where it should have been some dark night, and that first step is just going to be an awful long one. Someone else who doesn't know it's there will do the same in broad daylight. The door never should have been there in the first place. But now that it is, let's keep it shut and at the same time keep ourself or somebody else out of the hospital.

(1:00) This is one year in which we're going to need to make the greatest possible use of every piece of labor-saving equipment and device we can lay our hands on. Shortage of labor, coupled with wartime demands for increased production, makes it a "must."

Take hog production, for example. Movable houses are essential in the McLean county system of swine sanitation. Furthermore these movable houses are an inexpensive way to increase capacity when used with a central or community hog house. Self-feeders are something else that save time. They'll help to provide faster and more economical gains. Water, brooding and handling equipment

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conserves the operator's time, reduces chances of injury to animals and results in more efficient gains.

Diagrams of these, together with other pieces of equipment from loading chutes to hog wallows, are contained in Circular 554. This circular was prepared by D. G. Carter, professor of agricultural engineering, University of Illinois College of Agriculture. It's free for the asking. Send your request to me in care of _____, _____ and I'll see that you receive your free copy of labor-saving hog equipment right away. You may call for it by number, Circular 5-5-4.

(1:05) Here's our victory garden item for today about sweet corn from B. L. Weaver, associate in vegetable crops, University of Illinois College of Agriculture.

We want to keep in mind, he says, that it isn't too late to seed early maturing sweet corn until the latter part of July. So if you've had trouble with the weatherman, and your stand of corn is poor and yellow, plant some more and keep on hoeing. By the way, the chances are that the yellow corn will "come out of it." So don't hoe it out. Just replant where the corn didn't come up.

Another thing: Some of you who may be limited for space may have omitted corn from your victory garden. As well as I like roasting ears right out of the garden (they're better that way if we pick them at eleven and eat them at twelve), I'd hate to see some of you not raise roasting ears this year simply because you didn't have room. Well, here's something that's worth a try. You know that corn does better if planted in blocks than it does if planted in single rows. It pollinates better. But blocks take up room in a small garden. So take a chance on the single row. It's worth a try, Weaver

says, if we haven't room for three short rows. If you plant it in a single row try to run the row north and south, too. Now don't blame me if you don't get good roasting ears. We're making this suggestion only to those who don't have room in their victory garden for more than one row of corn.

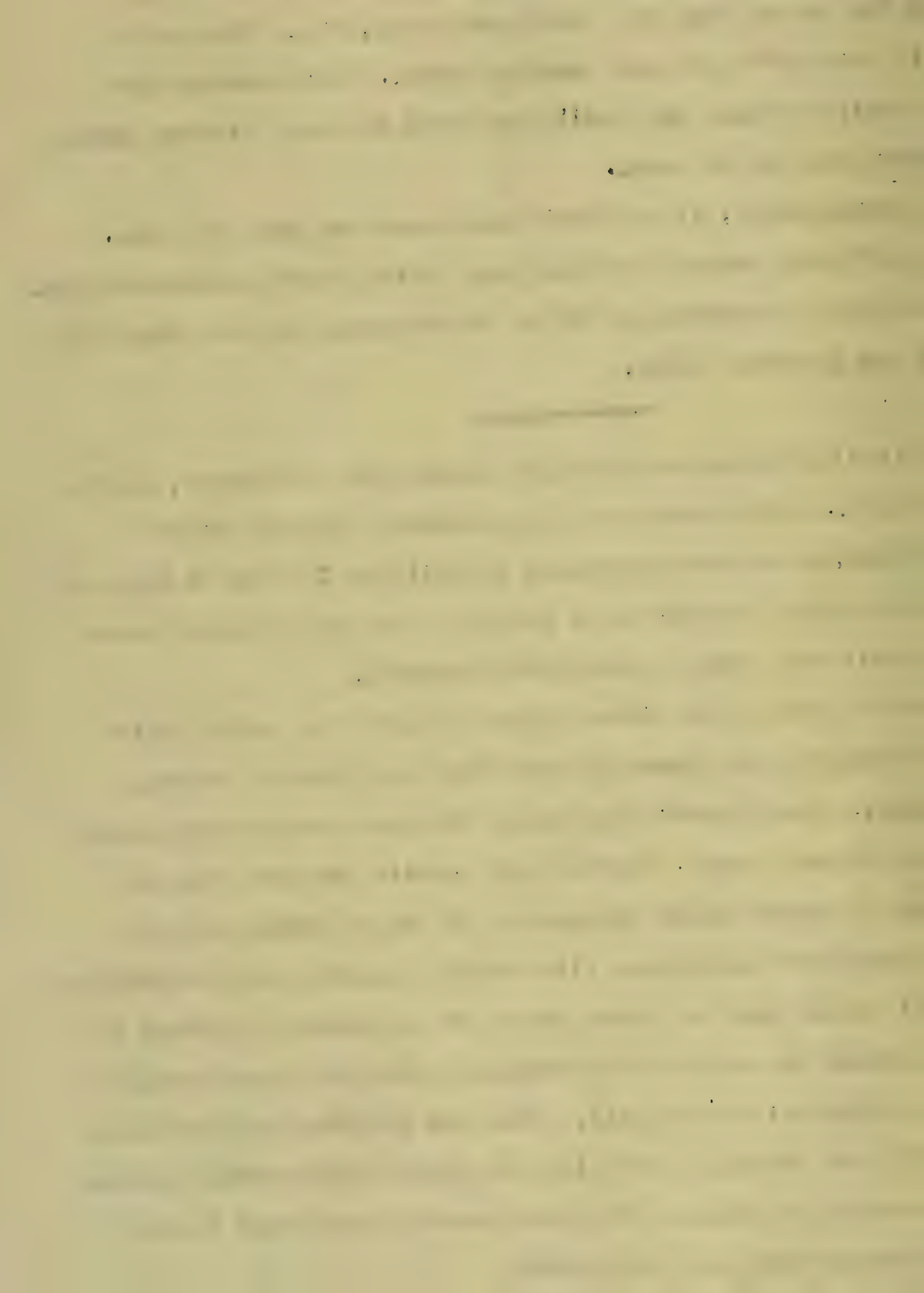
Incidentally, if you don't have room for even one row, plant it, let's say, where you grew peas, after you've harvested them. Don't forget crop succession in 1943. We're going to need every bit of food we can possibly raise.

(1:00) An abundance of flies means poor sanitation, in the opinion of H. B. Petty, extension entomologist, Illinois State Natural History Survey and University of Illinois College of Agriculture. So the logical answer is to practice thorough sanitary measures and in this way prevent flies from breeding.

Let's look at the three kinds of flies that affect dairy cows. First there's the house fly that lays her eggs in rotting organic matter. Then there's the stable fly that selects wet straw as a place to deposit eggs. Last of all there's the horn fly that lays her eggs in fresh animal droppings. If these three types of egg-laying places are destroyed, flies will be pretty well controlled.

All manure and wet straw should be composted or spread in the field. Around the edge of the compost a shallow trench should be dug and then filled with waste oil. When the maggots complete their growth they'll try to find a dry place to spend their resting period before they emerge as adults. For this reason, they crawl to the edge of the compost and into the trench.

Since it is probable that we may have more of a fly problem than in some previous seasons, Petty says every precaution should be taken to practice all recommendations for fly control.



(1:15) Rabies is now increasing, but it can be controlled and ultimately exterminated, says Dr. Robert Graham, head of the department of animal pathology and hygiene, University of Illinois College of Agriculture. Records show that, for eleven months of this fiscal year, 68 positive cases of rabies were diagnosed in the diagnostic laboratory of the Illinois State Department of Agriculture. That was an increase of more than 94 per cent during the same period a year ago. At the same time, the State Department of Public Health reports 40 per cent more cases had come to their attention than a year ago.

You know, rabies is spread by the bite of a rabid dog or other rabid animal. It occurs throughout the year, as well as during so-called "dog days."

All ownerless and stray dogs should be eliminated, Dr. Graham says. Report immediately to a physician as soon as bitten by a dog or other animal. There's no cure for rabies after it has developed, although Pasteur treatment is an effective preventive if given promptly.

If laboratory diagnosis is desired, do not kill suspected dogs. The clinical diagnosis should be made by a qualified veterinarian. State laboratories are located at Chicago, Springfield and Urbana.

Vaccinate all dogs annually to prevent development of rabies. Remember that vaccinated dogs are safer playmates for children.

Incidentally, I have a little leaflet on rabies I'd be glad to send you. If you'd like a free copy, just drop me a card in care of _____, _____. Ask for the leaflet on rabies. That's spelled r-a-b-i-e-s.

(1:00) Horse and mule production has "hit rock bottom," in the opinion of E. T. Robbins, livestock extension specialist, University of Illinois College of Agriculture. There are only a fraction more than two and one-half horses and mules of working age for each farm in the country. Of course, that doesn't include farms which reported no horses, mules or tractors.

Illinois needs more than 30,000 horses and about 3,500 mules under one year of age for replacements. This is calculated on the basis of 15 years as the total life of horses and 18 years for mules.

It doesn't pay to keep idle mares, Robbins states. He urges farmers to raise the kind of horses that suits them best. Even on farms where things have been mechanized, most farmers find it desirable to keep at least one team. A team of horses is a handy thing to have around when the tractor breaks down.

Prices on good, well-broken horses and mules were up \$25 a head in April. Horses still aren't as high in price as other classes of livestock and with the production of mechanized equipment destined to be greatly curtailed while the war lasts, it looks as if prices will go higher.

(1:30) Many small buildings essential to poultry and hog production and to crop storage have been destroyed by recent floods in some areas of Illinois. In other cases windstorms have caused considerable damage. This all adds up to the fact that such buildings must be replaced if we are to continue maximum production in our wartime effort.

Several plans for farm buildings prepared by the University of Illinois College of Agriculture are well suited for emergency

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consideration and use as well as for permanent structures. A number of building plans are already available in printed form, according to D. G. Carter, professor of agricultural engineering. Circular 552, for example, contains complete plans for an all-purpose poultry shelter. Especially designed as a summer shelter for growing chicks, the house is light weight, low cost and can be adapted readily as a brooder house or a year-around laying house for a small flock. Circular 552 is free for the asking. Just address your request to this station _____, _____ and I'll see that you receive your free copy right away.

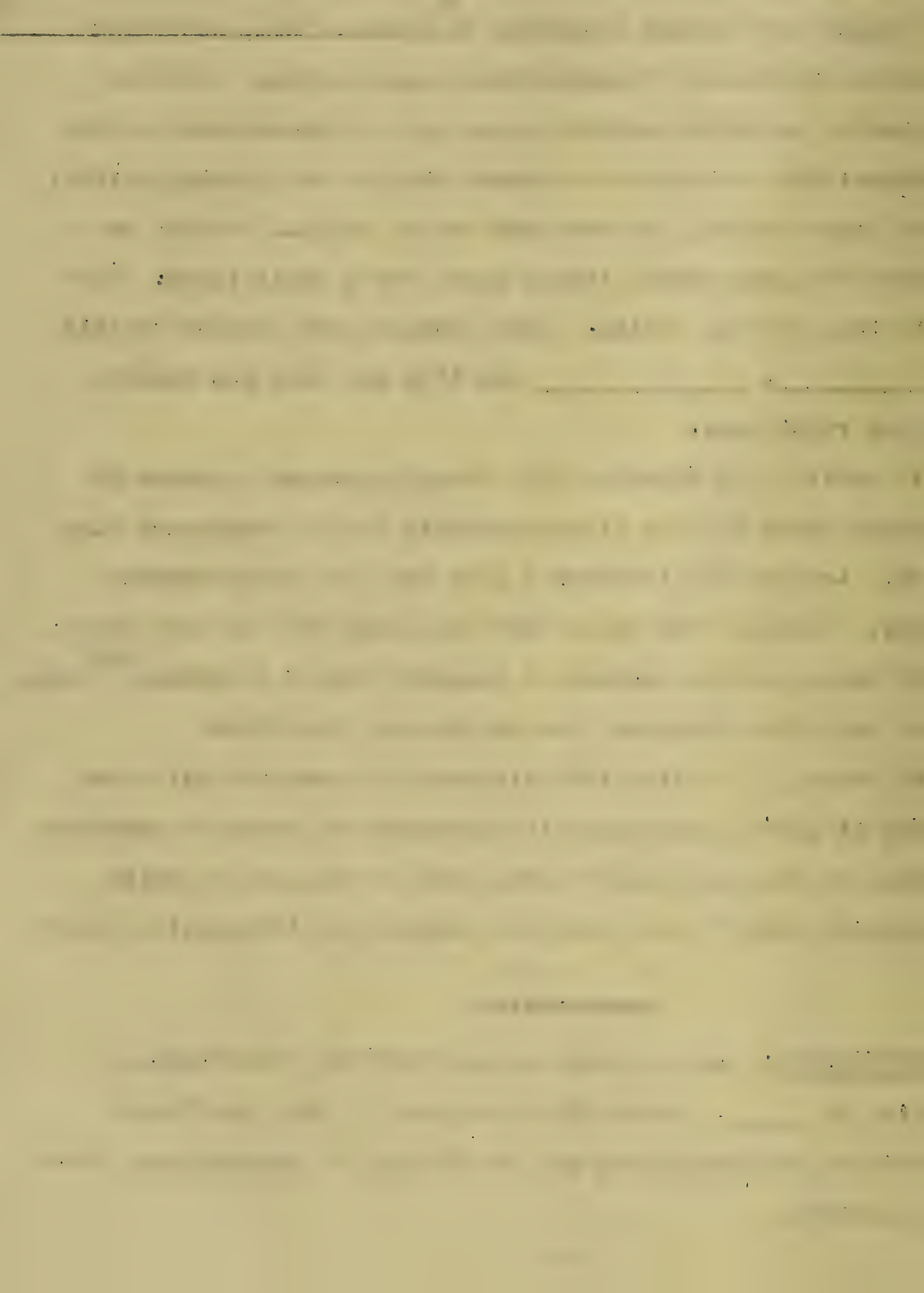
In addition to Circular 552, Carter mentions a number of other pamphlets which will be of considerable help in emergency farm construction. Leaflet 376 includes a plan for a standard movable brooder house. Circular 525 deals with the straw loft poultry house. Circular 554 describes and pictures a complete line of individual/^{hog} houses, self-feeders and other equipment for use in hog production.

Of course, I realize it's difficult to remember all these numbers. But if you're interested in emergency or permanent construction, remember to drop me a card on the kind of building in which you're interested and I'll see that you receive the information right away.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914



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FORTY-FIFTH

ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture)

Speaking time: 9:05 minutes

June 12 1943

June 7, 1943

University of Illinois

(FOR BROADCAST USE ONLY)

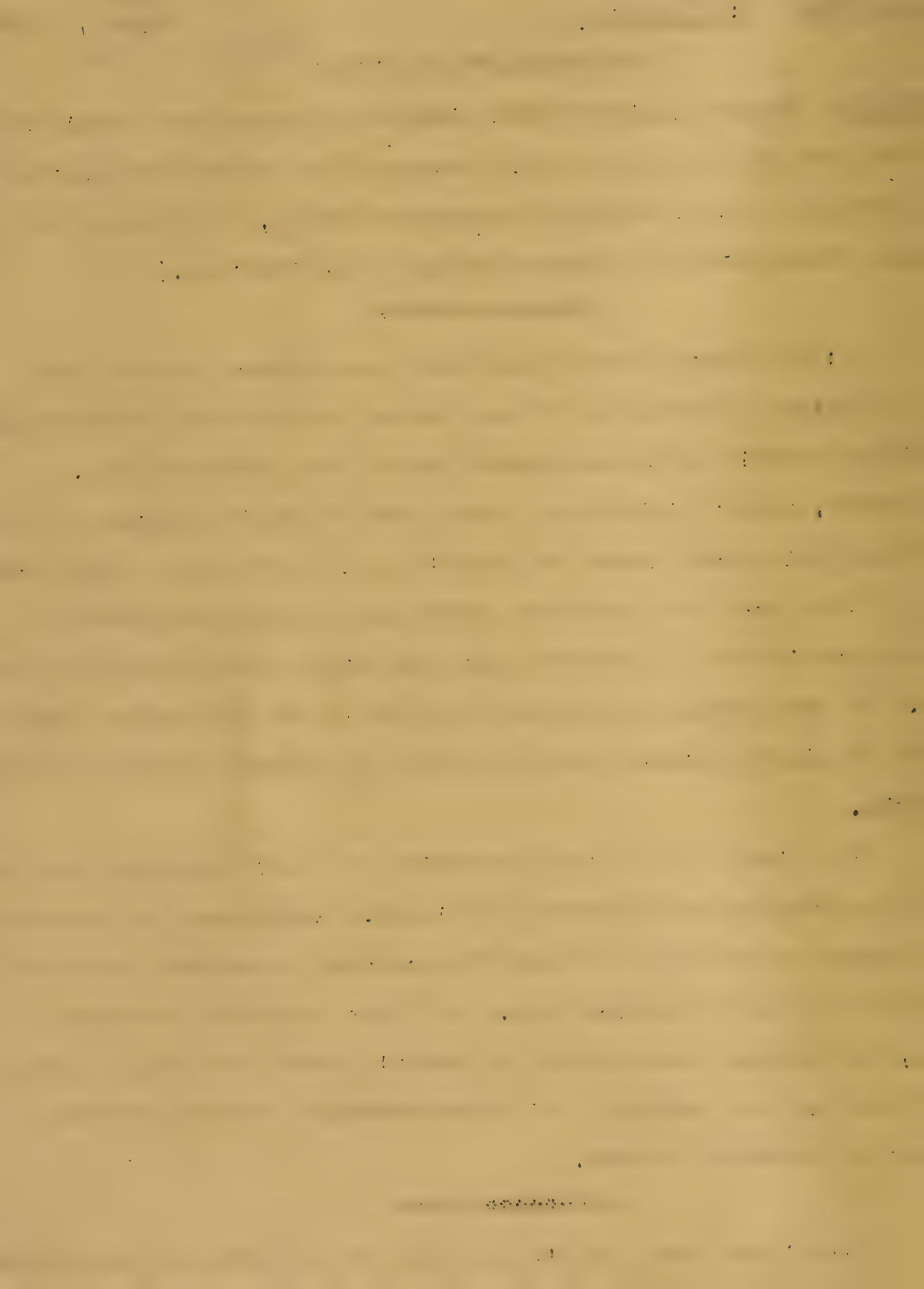
(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture.)

(:50) Recently there have been some unusual losses from plant poisoning. Prevention of such losses depends upon eliminating or avoiding certain poisonous plants during the grazing season. Black locust, deadly nightshade, young cockleburrs, buttercup and wild cherry have all caused losses of animals on Illinois farms this spring.

The fact that poisonous plants have not caused losses on certain farms is not a guarantee that they will prove harmless in the future. If hay containing poisonous plants is cut for winter feeding, symptoms of plant poisoning may even occur in animals during the winter months.

The first step in the prevention of plant poisoning involves a careful survey of the pastures and fields. Assistance in identifying specimens is available through the agronomy department, University of Illinois College of Agriculture. If plant poisoning develops in animals, the healthy ones should be promptly moved from the contaminated field and the assistance of a veterinarian obtained for the treatment of affected animals.

(1:00) Now for a bird's eye view of the nitrogen fertilizer situation as far as orchardists are concerned.



The prospects for an ample supply next year are improving, according to V. W. Kelley, extension horticulturist, University of Illinois College of Agriculture. You'll recall efforts to obtain a supply for March delivery 'hit a snag' this year. However, growers desiring fertilizer for fall applications this year should place their order as soon as possible after July 1, Kelley says. Orders for application next spring should be placed not later than January 1.

In order that fruit growers may get a fair allocation of nitrogen fertilizer, delivered on time next year, it's essential that the fertilizer division of the Food Production Administration be supplied with an estimate of next year's requirements for Illinois. Every orchardist is being asked to send a post card to Kelley at the University of Illinois reporting how much fertilizer and what kind will be needed between July 1 this year and July 1, 1944, how much will be applied this fall and the acreage or number of trees to be fertilized. Incidentally, if you would like to drop me a card here at _____, _____ giving that information, I'll be glad to forward it to Kelley.

(1:00) Here are six suggestions for safety from E. W. Lehmann, head of the department of agricultural engineering, University of Illinois College of Agriculture. Of course, they'll apply to all farm workers, but especially for those doing farm work for the first time.

Watch your health. Get a medical check-up and make sure you can do heavy work safely. Keep a first aid kit on hand so you can take care of minor cuts and scratches immediately.

Eat three well-planned meals each day. Don't forget to use a little salt along with your drinking water in hot weather. Use as

much as one eighth to one-fourth teaspoonful of salt to each glass of water when the weather's hot. Eat a snack in the middle of the morning and afternoon when working hours are long and hard.

Stoop to pick up something instead of bending low. Use your knees in lifting and keep your back straight.

Wear gloves if the work you're doing is a little rough. Wear a broad-brimmed hat when the sun's beating down.

Speak to the horse when you walk behind him. Throw the machine out of gear and unhitch the horses when making any adjustments.

Read directions for operating machinery. Stop the machine for even a minor adjustment.

Practicing these six suggestions for safety will go a long way toward meeting our food production goals for 1943.

(1:00) Soybean hay compares favorably with alfalfa hay and is slightly higher than red clover hay in protein content, according to H. J. Snider, agronomist, University of Illinois College of Agriculture. The average analysis of 50 samples of soybean hay taken from both northern and southern Illinois showed 325 pounds of protein and 64 pounds of essential minerals for each ton of hay. Incidentally the soybean hay was harvested at pod stage.

Analysis of 50 samples of alfalfa hay from various parts of Illinois averaged 344 pounds of protein for each ton of hay, only 19 pounds more than in soybean hay. Likewise, the minerals in a ton of alfalfa hay were found to be only 10 pounds more than in soybeans.

In the case of red clover hay, the protein content was 29 pounds less for each ton of hay than for soybean hay. At the same time, the mineral content was four pounds more.

On the basis of these experiments, soybean hay may be substituted in cases where alfalfa and red clover have been killed. That way we can still raise a hay crop this year that will be high in protein and essential minerals.

(1:00) Now let's reach down in the mail bag and pull out a few answers to the main questions Illinois farmers have been asking since June 1. By the way, these answers come from the crops men at the University of Illinois College of Agriculture.

First, what would you recommend that we seed now for late summer pasture? Well, try Sudan grass and soybeans. One bushel and a half of soybeans and 15 pounds of Sudan grass ought to be about right. The same is true for millet and soybeans, another good mixture.

Now a number of inquiries have been coming in on the availability of Proso millet seed. The university doesn't have any for sale, but we'll be glad to tell you where to get it if you care to drop me a card here at _____. We can't very well mention right now all the seed dealers who have Proso millet seed available.

Here are several inquiries regarding Reed canary grass. Well, if it can be established successfully, it furnishes pretty good pasture and hay for most any type of livestock. It is generally recommended for swampy, fertile soil. It's advised that anyone trying it start in a small way at first to see if you can get it established. For further information on Reed canary grass, write for the free pasture circular 4-6-5.

(1:15) I have a note here on silage quotas and hay budgets for dairy cows. That sounds as if we might be getting ready to

register animals for coupon ration books, doesn't it? Well, we're quite sure it won't come to that, especially if we look ahead to next fall and winter and do a little planning.

As a general rule dairymen plan for about four or five hundred pounds of good hay a month for each cow. Of course, we're assuming they have silage to feed along with the hay. Two and one-half tons of silage a cow each year is needed, but more is still better.

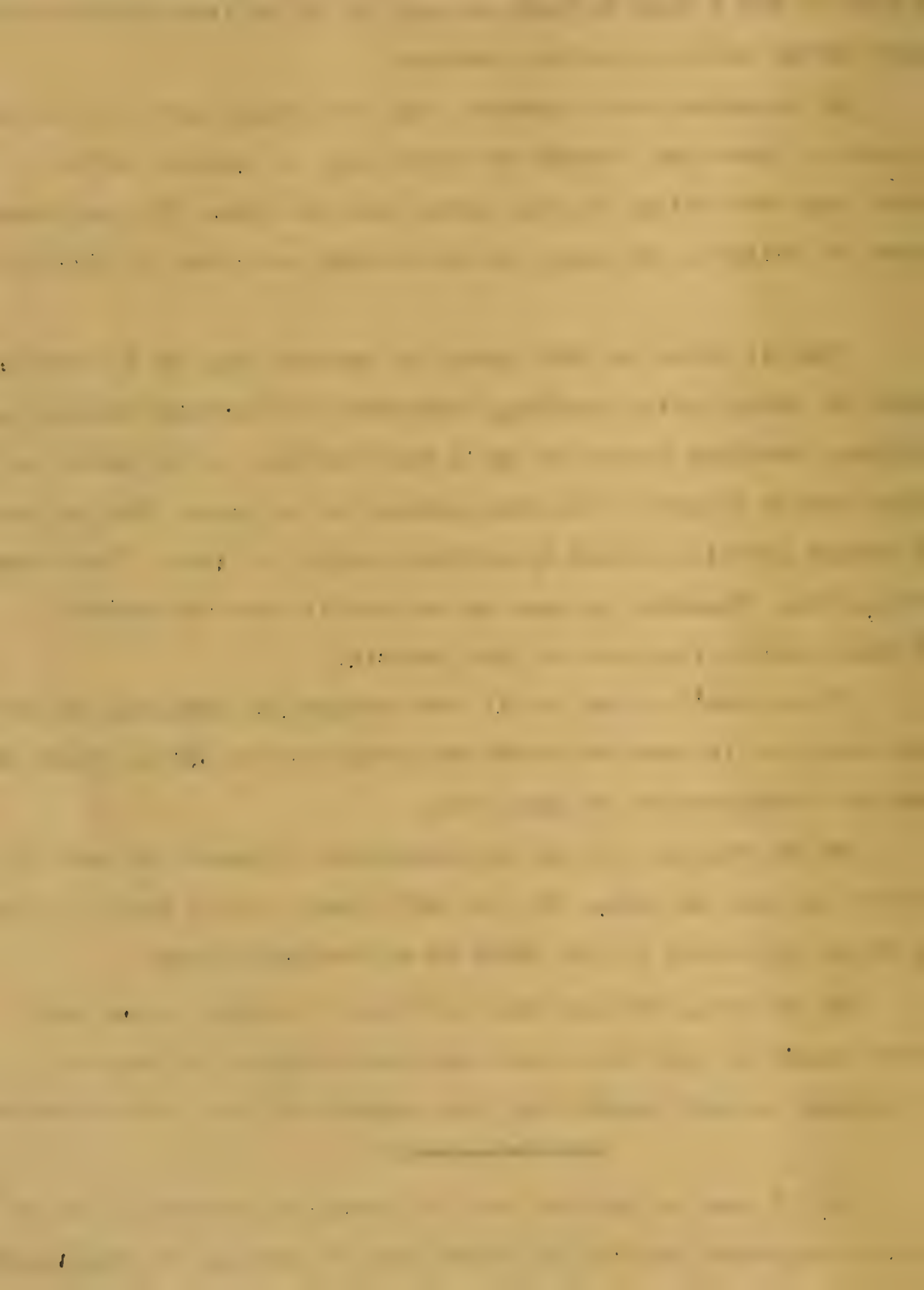
When it comes to this matter of cutting hay, W. B. Nevens, professor of dairy cattle feeding, University of Illinois College of Agriculture, cautions us not to let a field of hay go for awhile after it's ripe simply to get a few extra pounds to the acre. You get hay with a higher protein content by cutting early, you know. That means more milk, too. Remember to cure hay so you'll save the leaves. That's where you'll find most of the protein.

If you don't think you'll have enough hay from the meadows you have now, put in some temporary hay crops such as Sudan grass or soybeans or a combination of these two.

As for silage, you can use sorghums, soybeans and most of the grasses as well as corn. If you don't have a silo, keep in mind that a trench silo will do all right on well-drained land.

At any rate, two and one-half tons of silage a year and about 500 pounds of good hay a cow each month will go a long way toward keeping up milk production this summer and next fall and winter

(1:15) Some of us have been depending on bluegrass for so long we've forgotten there's any other kind of pasture, in the opinion of Fred Francis, assistant in animal husbandry, University of Illinois



College of Agriculture. So he urges cattlemen to look to rye or other cereal grains as a supplement to bluegrass for an all year-around pasture system. That's one of the ways to get larger returns from steers.

Here's the way rye works into the pasture set-up at the university. Seeded early in the fall, it's ready for pasture about November 1. One steer to the acre is about right, and Francis says their experiments show yearling steers gain about three-quarters of a pound a day. He points out you can leave the steers on rye pasture all through November, and then turn them on bluegrass, which, by the way, had not been pastured during the previous summer. That's a point to remember: not to pasture that bluegrass in the summer. Just let it grow.

Now steers are allowed to run on this bluegrass pasture all winter, one steer to the acre. They may have to paw around occasionally to get enough to eat, but only a small amount of protein concentrate is needed in addition to this bluegrass. Of course, when snow covers the ground, you feed some roughage. But as a general rule those steers will stay on bluegrass pasture until the rye field is ready again in the spring along about March 1.

You probably can pasture two steers to the acre on this spring rye. Furthermore, Francis says they found that long-yearling steers in the spring of 1943 gained 3.3 pounds a day for eight weeks.

Two fields and two pasture crops, bluegrass and rye, used in this manner, will give you a mighty good all year-around pasture which will help to insure larger returns from steers. The steers should be put in dry lots sometime during July and given a 60- to 90-day feed of corn before being marketed.

(1:45) Many Illinois stockmen are in a position to take their choice. They can continue to feed cattle for patriotism and pleasure, or they can feed hogs for patriotism and profits, says E. T. Robbins, livestock extension specialist of the University of Illinois College of Agriculture.

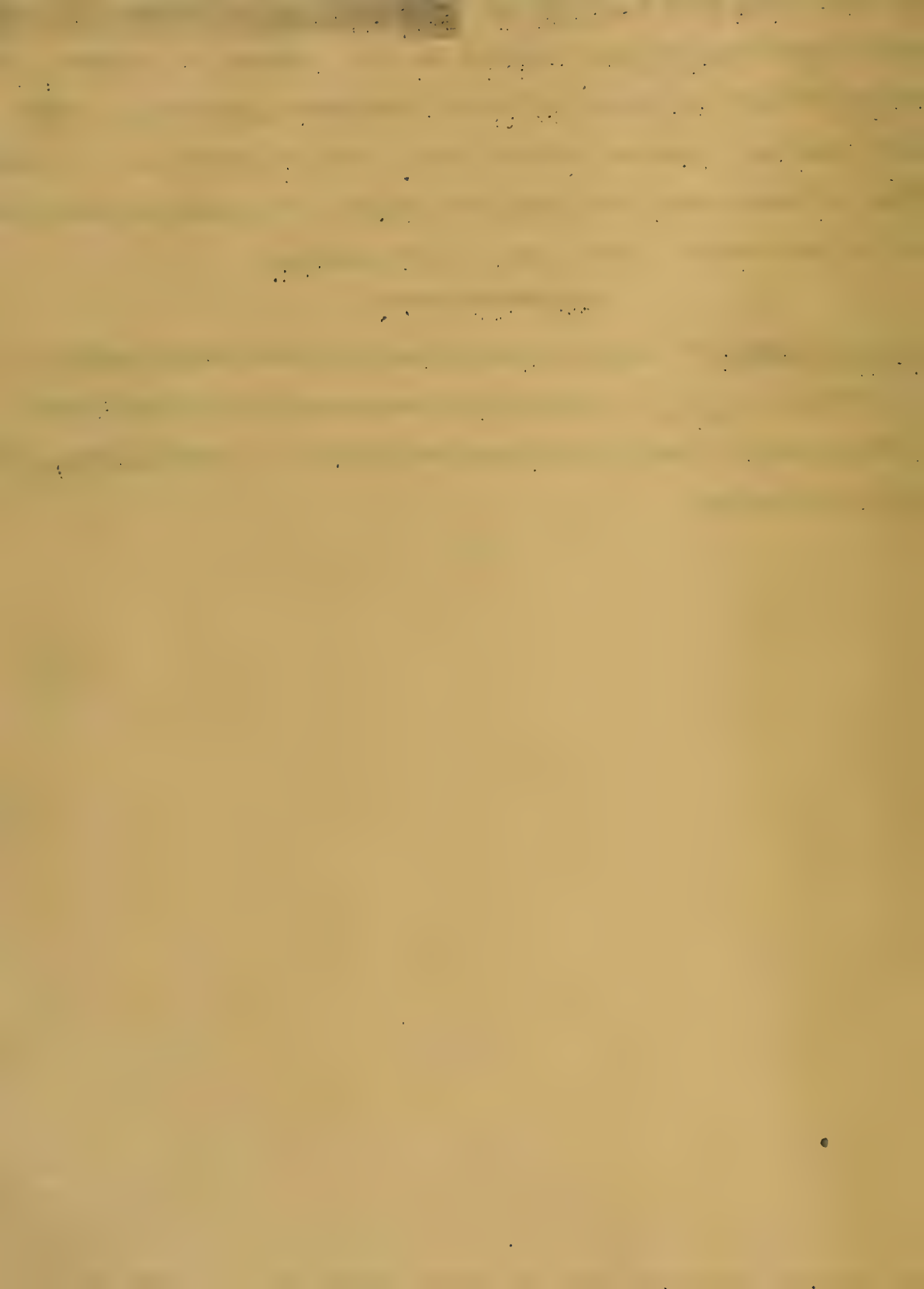
Cattlemen are famous for their partiality to the livestock of their choice, Robbins points out. They are game and will take chances. However, they demand at least as good a chance for a profit as for a loss. Now the prices of stocker and feeder steers, the costs of 100 pounds gain and the prices of fat steers are all in about the same notch. A little advance in feed costs or a slight downward manipulation of beef ceilings could erase all chance for profit. Veteran cattlemen express emphatic reluctance to invest in thin steers under prevailing conditions.

Some feeders have already reduced their cattle business. Many have raised more pigs this year, and others have bought feeder pigs and even light-weight market hogs for further feeding. While profits from pork production have been steadily dwindling for months, they have not yet vanished. Most of the cattlemen are inclined to feed hogs to heavy weights. Their shift from cattle to hogs will reduce beef tonnage, but may not seriously affect total meat production. Anyway, they say, pork is famous for army consumption and its production has been urgently requested. They are seeking financial safety in shifting from cattle to hogs.

Robbins states that beef and pork require about the same amounts of grain and other concentrated feed for their production under good corn belt systems of raising and fattening the animals, as shown by experimental results. In two series of tests somewhat less

than 500 pounds of such feed was used to produce each 100 pounds of dressed pork from hogs finished at 225 pounds or to produce 100 pounds of dressed beef from steers finished at 1220 pounds. Of course, the production of beef involved the use of much more pasture and other roughage than was required for the pork. Thus it costs more to make beef than to make pork, even when the calves are raised by the feeder so that he has them at actual cost of production.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.



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ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 5 $\frac{3}{4}$ minutes

June 10, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture.)

(1:00) Let's not overlook the possibility of iodine deficiency when litters of pigs are born dead or when some pigs in a litter are hairless or show immature hoof development. This report comes to us from the department of animal pathology and hygiene, University of Illinois College of Agriculture. During the past winter and spring, some losses of litters coming to the attention of the department were believed to be connected with iodine deficiency.

Iodine-deficient areas are known to exist in the Great Lakes area, especially in such neighboring states as Wisconsin and Michigan. In Illinois farms where pigs have suffered from an iodine deficiency-like disease, the losses occurred in the winter and spring months. Iodine deficiency in newly born pigs may be prevented largely by feeding small amounts of potassium iodide to sows in the feed or drinking water during the last two months of pregnancy. A dose of two level teaspoonfuls of potassium iodide dissolved in water and thoroughly mixed with the grain or added to the drinking water once a week is sufficient for 50 sows. One-fifth teaspoonful is sufficient for five sows. So far as is known, potassium iodide need not be fed to swine other than pregnant sows and gilts.

ORIGINAL ARTICLES

THE EFFECT OF VARIOUS FACTORS ON THE RATE OF GROWTH OF THE HUMAN BODY

BY DR. J. H. HARRIS, JR., M.D., PH.D., AND DR. J. H. HARRIS, JR., M.D., PH.D.

From the Department of Physiology, University of Chicago, Chicago, Ill.

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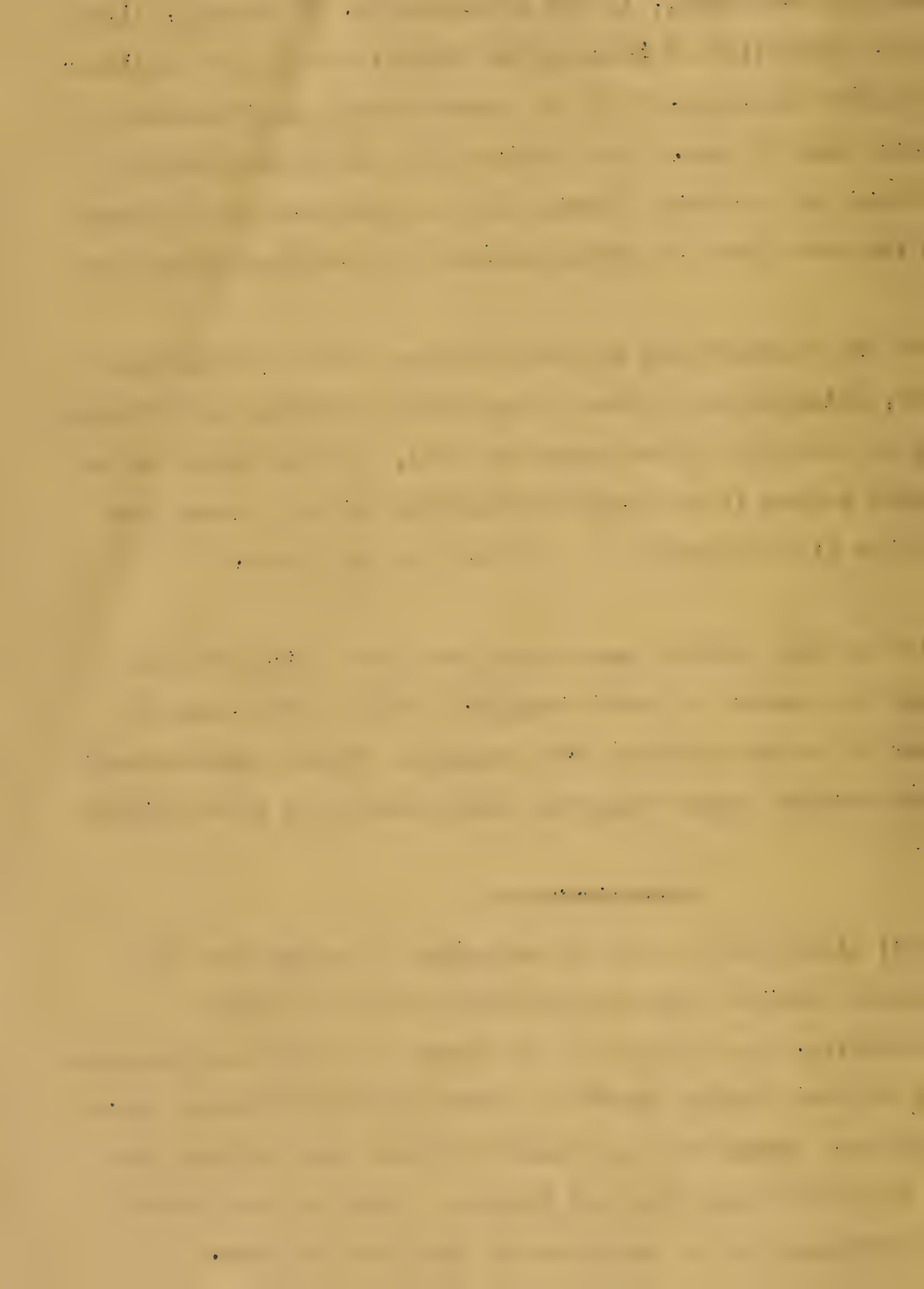
(1:00) Spring lambs still on hand may well be carried along to heavier weights than usual, in the opinion of E. T. Robbins, livestock extension specialist, University of Illinois College of Agriculture. Before price ceilings, 75 to 80 pounds were popular marketing weights at this time of year. Now a delay until the lambs weigh 90 to 100 pounds may be in order. During June on good pasture the lambs running with the ewes grow and fatten rapidly and cheaply without any grain.

When the weather gets hot and pastures begin to ripen and dry up in July, gains become slower. Lambs with a considerable fleece may be helped at that time by shearing the wool. If the lambs can be shorn two months before it is estimated that they will be ready for market, the pelts will be useful in clothing the air force.

Only ewe and wether lambs which have been docked should be carried through the summer to heavy weights. Docked lambs have few dirty tag locks to become infested with maggots. Wether lambs usually sell \$1 a hundredweight higher than ram lambs which have grown beyond light weights.

(1:15) Livestock men who are shipping in steers from the south and southwest should take precautionary measures against a screwworm infestation, according to H. B. Petty, extension entomologist, Illinois State Natural History Survey and University of Illinois College of Agriculture. Owing to a dry season in Texas many animals are being shipped into Illinois, Iowa and Indiana. This is quite likely to cause some outbreaks in the screwworm at this time of year.

Although the screwworm can not survive the winters in Illinois, they are transported on infested animals, and serious outbreaks



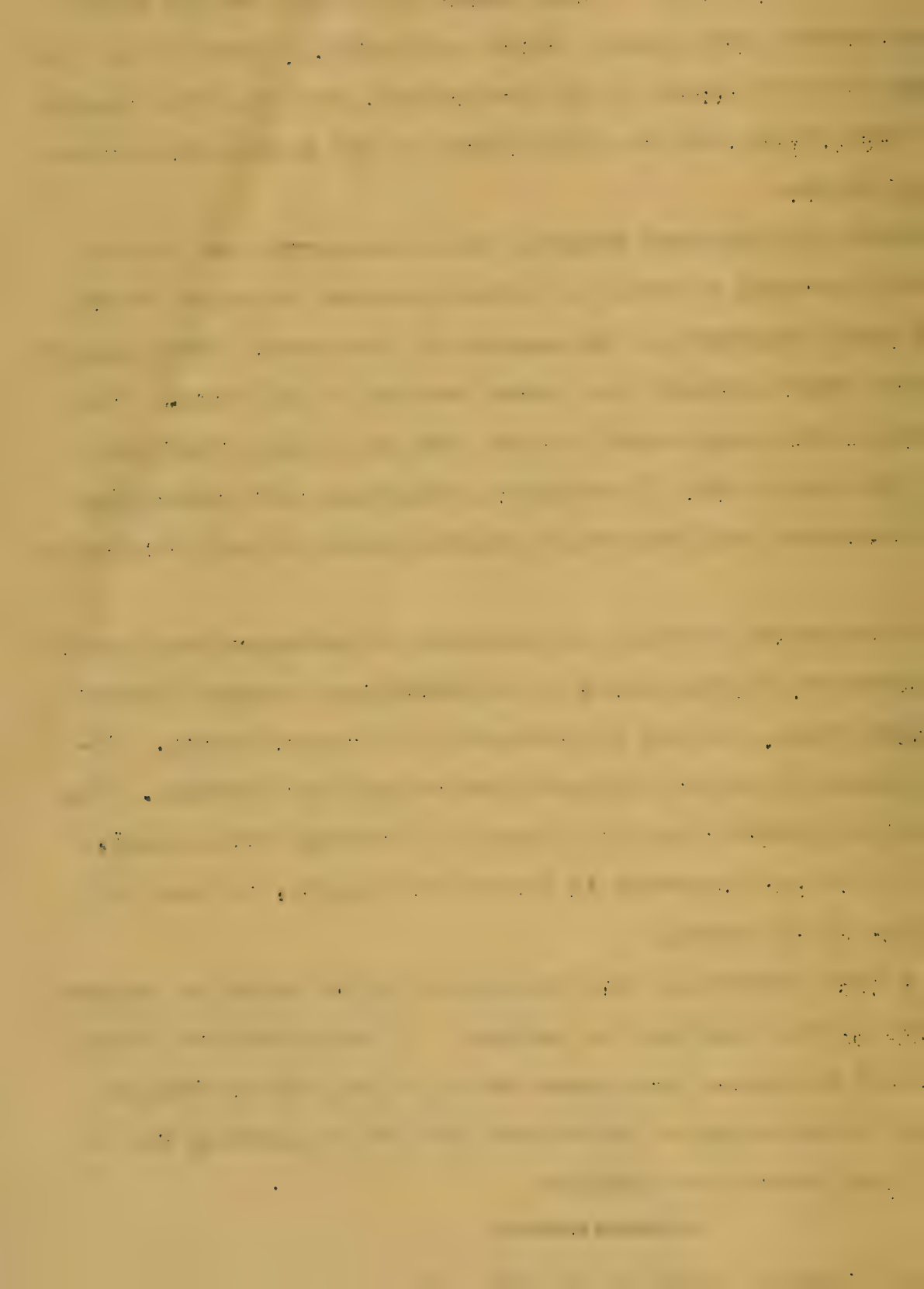
have been known to occur. The screwworms are in open wounds when the cattle leave the south. Many of them pupate and emerge as the adult fly after the animals have reached their destination. These flies then lay their eggs on open wounds of any farm animal, and the small maggots drill deeper and deeper into the live tissue of the animal, often penetrating vital organs.

Besides killing many animals, these screwworms have often caused loss of eyesight, as well as a great decrease in weight of the animal. The usual symptoms are the maggots in the wound. These maggots secrete a toxin which prevents the normal healing of the wound. The infested animal hunts shady spots to hide away and unless found and treated will eventually die. In addition, blowflies that ordinarily feed on dead carcasses will find this infested wound and will lay their eggs on it.

The treatment for these infestations of screwworm has come to be known as smear No. 62, consisting of diphenylamine, benzene, Turkey red oil and lamp black. It can be purchased from veterinarians. Directions for mixing it can be obtained from county farm advisers. This material should be pushed into all pockets of the wound with a small paint brush. It is not necessary to remove the maggots, as they will die and drop out of the wound.

As a last precaution, all shipped-in cattle should be checked for open wounds before being put on pasture. If screwworms are found, the wounds should be treated with smear No. 62 which can be obtained from your local veterinarian or directions for its preparation can be obtained from your county farm adviser.

(1:00) Illinois dairymen are urged to continue feeding grain throughout the summer. J. G. Cash, dairy extension specialist,



University of Illinois College of Agriculture, says this will add to the annual milk supply, maintain production at higher levels and help cows remain in better condition.

During the spring months, Cash says, pastures are succulent and high in protein. Consequently, grain mixtures fed at this time of year may consist largely or entirely of farm grains. Later on in summer when pastures are more mature, the protein content of the grain mixture should be stepped up to approximately 14 per cent when cows are on no-legume pasture and to about 11 to 12 per cent when they are on legume pasture.

The amount of grain to feed cows on pasture will depend upon the production of individual cows, the quality of pasture and conditions of the cows, Cash states. If necessary, enough grain and roughage should be fed to keep cows in good condition and to prevent any abnormal decrease in production. Usually one pound of grain for each five or six pounds of milk is sufficient. It's difficult to regain loss in production in summer caused by too little feed. Caution is urged at this point to make sure pastures are supplemented to prevent loss in production.

(1:30) Let's take about a minute and a half to reach down in today's mail bag of crops and soils questions from Illinois farmers and listen to the answers from staff members of the University of Illinois College of Agriculture.

Numerous questions are coming in concerning field bindweed, sometimes called creeping Jenny. Incidentally, one farmer said it was so bad that he tripped over it in one corner of 40 acres of cowpeas and took the whole field. Well, anyway, that gives you a pretty fair idea of just how field bindweed can take over. Some of you may never have seen it; some of you probably didn't know what it was if you did.

Of course, a description of it and methods of control takes more time than we can allot this morning, so we'll refer to the free leaflet 1110 that tells all about it. I'll be glad to send you a copy if you drop me a card in care of _____, _____. An easy number to remember on field bindweed, three one's and a naught, 1-1-1-0.

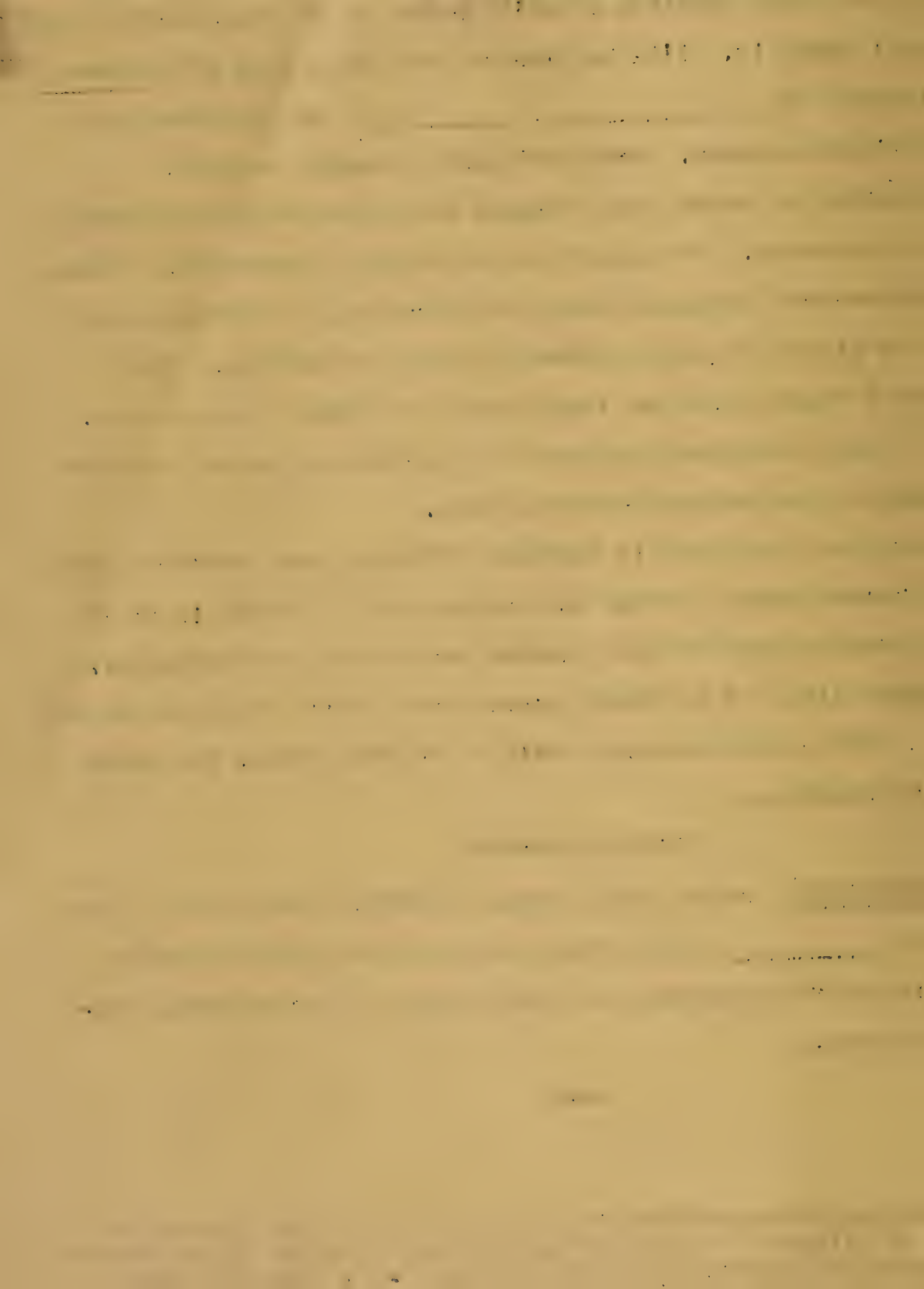
Speaking of weeds, many farmers are asking about the control of dodder in lespedeza. The answer is, of course, prevention. Always insist on dodder-free lespedeza when you're buying. However, small patches may be killed by putting straw on them and burning. When dodder covers a field, plow the land before the dodder goes to seed. By the way, I might mention that dodder is parasitic, yellow in color and widespread in the lespedeza-growing area.

From the flood area in southern Illinois come questions from unfortunate farmers whose plaster has dropped off the walls in their homes. They want to know if this plaster can be used as fertilizer. Plaster contains lime and if finely ground would serve the same purpose as limestone. The coarse material would be of some value, but would be improved by grinding.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914



Speaking time: 7 minutes

June 14, 1943

(FOR BROADCAST USE ONLY)

ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Mail all requests for information to F. J. Keilholz, extension editor, University of Illinois College of Agriculture, Urbana.)

(:25) Here's a note from V. W. Kelley, extension horticulturist, University of Illinois College of Agriculture, about this year's transparent apple crop. Harvesting is expected to begin about June 20 and may continue through July 10. What's more, there's going to be a full crop. The quality looks good, too. You know, transparent apples were developed primarily as a sauce variety, so that may be a tip for you housewives to get ready to can your next winter's supply of apple-sauce within the next few days.

(1:10) I never knew I had so many nice neighbors until I found out I couldn't buy a sprinkling can to water my victory garden. It so happened that some of them couldn't buy a hoe like I had. Yes, sir. You should see the trading that's going on across the back yard fences out our way. And, I suspect the same thing's happening to you.

Now this matter of not being reluctant to call upon your neighbor for the loan of some equipment will apply to combines, tractors and plows as well as sprinkling cans and hoes. So you folks who find your part in furnishing food for freedom is being held up because you don't have the equipment, ask your neighbor. Naturally, you'll want to return the machine in as good shape as it was when you borrowed it. However, staff men at the University of Illinois College of Agriculture

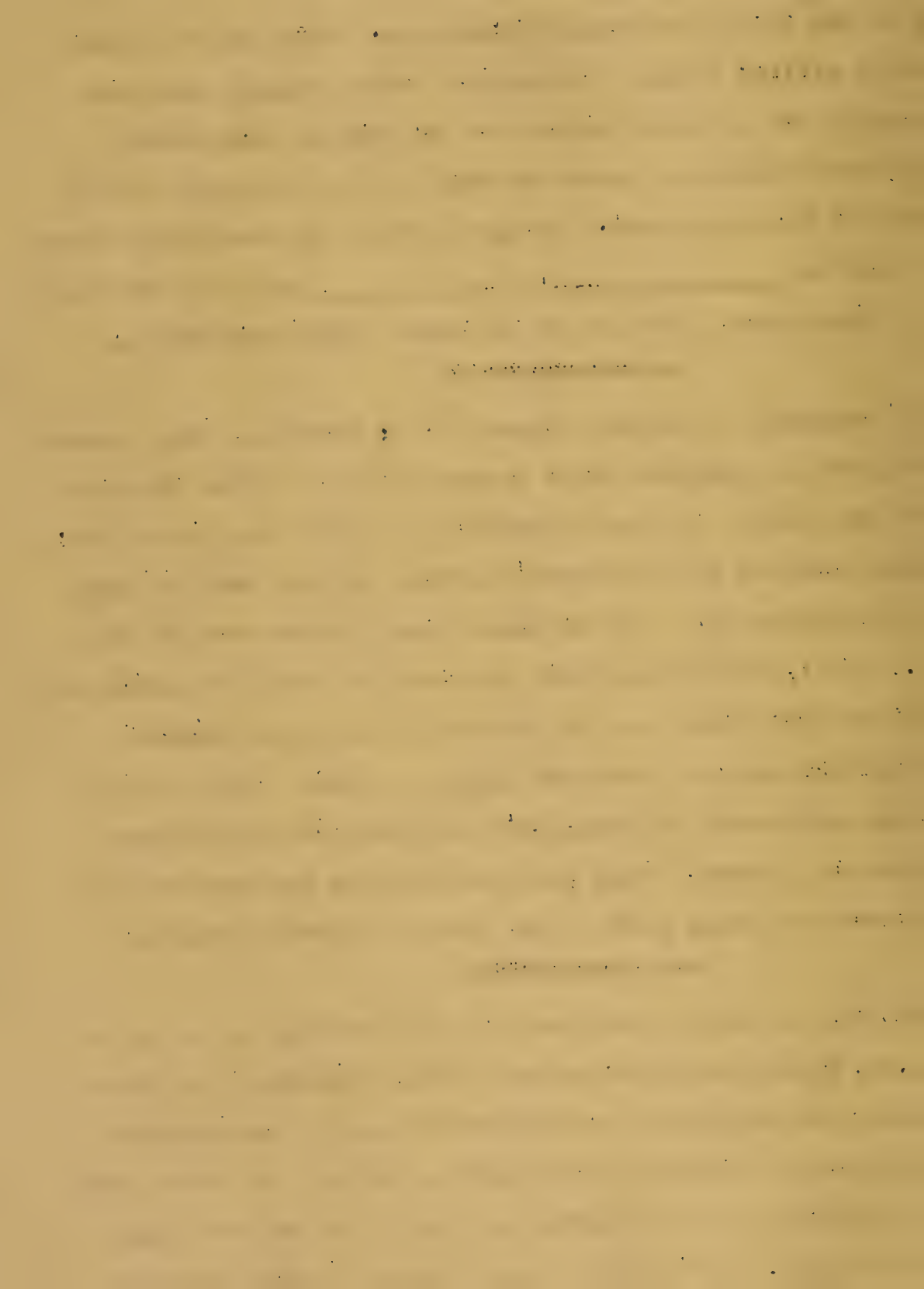
who have been studying this matter of machinery rental say that returning a borrowed machine in the same condition as when you found it isn't quite enough on the best of regulated farmsteads. They say that borrowers should be willing to pay a reasonable rental charge, and have accordingly worked out a rental schedule on an hour an acre basis.

This rental schedule shows how much should be charge for almost all pieces of farm equipment. A copy is free for the asking, just address your card to _____, _____ and I'll see that you receive it right away. Ask for it by name---"Machinery Rental."

(:35) Speaking of neighborliness, E. O. Johnston, Piatt county farm adviser, reports an incident which occurred in his office the other day. It's just an example of what's happening all over the state, too. It seems a farmer dropped into Johnston's office and was asked if his corn was ready to cultivate. (One of those lucky fellows who got his corn in early.) Well, this farmer said his corn was ready to cultivate, all right. But it would have to wait for a while since his neighbor down the road had 120 acres of corn and beans to plant. Just as soon as the ground was dry enough to work, he'd see that his neighbor got that corn planted in a hurry. That just goes to show how farmers are teaming up to carry out their part in the food for victory program.

(1:00) Our victory garden item for this morning is on insect control from H. B. Petty, extension entomologist, Illinois State Natural History Survey and University of Illinois College of Agriculture.

Petty says to "give the early worm the bird." In other words, don't wait until a great deal of feeding has been done and then hope to get the best results. Let's take cabbage worms. When they're little, they don't eat very much and consequently don't cause very much damage.



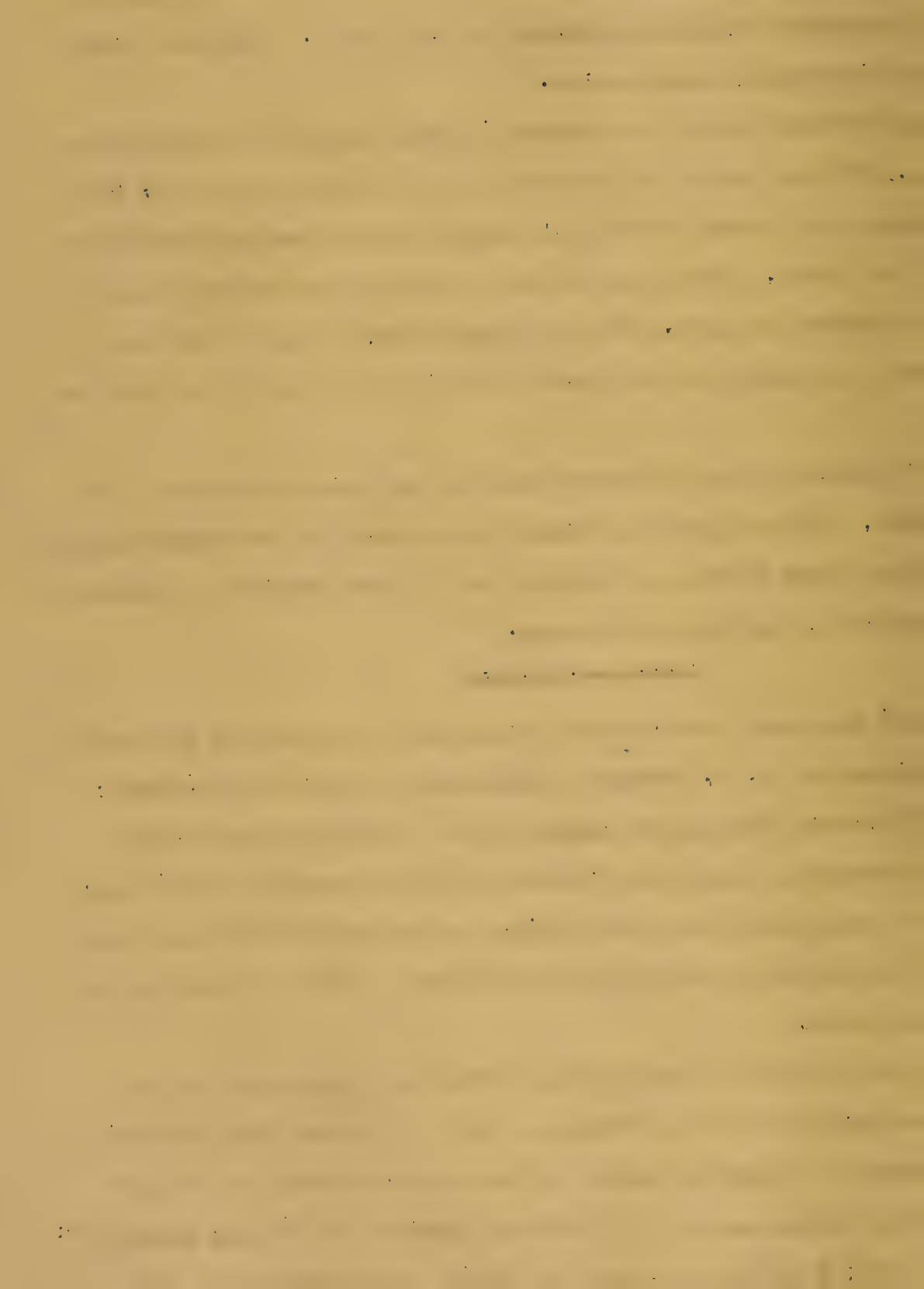
Furthermore, a little lead arsenate will easily kill them. But when these worms become larger, they'll need to eat more of the leaves in order to get enough of the lead arsenate to kill them. The same thing is true of the Colorado potato beetle.

Now, another point to remember in this matter of controlling insects early. If you see a few Mexican bean beetles, we'll say, on the plants, hand-pick them. Don't wait until you see several and then start to dust or spray. Just keep in mind that few now means a great many more in a matter of days. So hand-pick them. And, by the way, just drop them in a small tin can that's about half full of any kind of oil.

Let's start early on insect control and save ourselves a lot of trouble later. If we apply the right insecticide to the right insect at the right time (and that means early), we'll have success in controlling those insects in our victory garden.

(1:00) Here are the dates of Illinois horse pulling contests this year as listed by E. T. Robbins, livestock extension specialist, University of Illinois College of Agriculture. Incidentally, these horse pulling contests, which have become an annual event in Illinois, not only afford wholesome and instructive entertainment for spectators but also help to identify the type of draft horse which is most efficient at moving loads.

The first contest listed will be held at Pinckneyville on July 12. Others will be held at Urbana, July 27; Farmer City, August 3; Charleston, August 7; Lincoln, August 9; Marshall, August 12; Belle-ville, August 13; Paris, August 17; Milford, August 18; Salem, August 24; Genup, August 25; Fairfield, August 26; Bridgeport, August 27; Oblong, August 31, and Petersburg, September 2. Fifteen contests in all, which



is five less than a year ago. However, this report comes to us as of the first of June, and Robbins points out that no doubt other contests will be added to the schedule before it is completed.

(:45) Victory gardeners are urged to summer-prune their raspberries and blackberries for best results. This report comes to us from V. W. Kelley, extension horticulturist, University of Illinois College of Agriculture. A practical way to accomplish this job of summer-pruning is to walk through the patch at weekly intervals for two or three weeks and pinch or cut off the tops of those shoots which have reached a height of two feet. All black raspberries, purple raspberries and blackberries should be tipped back, Kelley says. But red raspberries, however, should not be headed back. Red raspberries send up suckers from the roots at the base of the plants and don't form lateral branches readily. Heading them back causes more suckers, which is undesirable. But heading back blackberries, black raspberries and purple raspberries will cause them to form laterals instead of producing tall, unbranched canes which are easily blown or bent over by the wind.

(1:00) Thousands of boys and girls are ready to help you in your own community and in nearby cities, according to P. E. Johnston, state supervisor of emergency farm labor. If you need this Farm Volunteer help, he says, make your wants known soon.

These Farm Volunteers are healthy, earnest, patriotic boys and girls who want to do their bit. They'll receive helpful training in school and want to work on farms during spare time and vacation. They can do chores, weeding or hoeing. They can drive a team or tractor, shock grain, harvest fruit and do other farm tasks within reasonable limits of their ages and ability.

1911

Many of these boys and girls will be available all summer for day work. A number are anxious to live with farm families during the summer. They'll work for board, room, washing and a reasonable payment.

Farmers employing boys and girls will want to explain each job in detail and then watch the boy do the work to make sure that he is following the instructions.

"If the student hasn't learned the instructor hasn't taught."

All farmers interested in using this type of help should contact their county farm adviser immediately, as boys are available in most counties now.

(1:05) Illinois farmers set a limestone spreading record in 1942, according to C. M. Linsley, soils extension specialist, University of Illinois College of Agriculture. Records assembled by the State Geological Survey show that three and three-quarter million tons were applied---enough to lime about two million acres. This is a million tons more than has ever been applied before in any one year.

However, all of this limestone will contribute very little towards increasing production unless clovers are grown on the land, Linsley says. Benefits from lime come only through the growing of clovers.

And now is the time to plan for next year's clover and alfalfa seedings. Where the land has not been limed or phosphated the soil should be tested as soon as possible to find out where lime and phosphate are needed. Furthermore, it's important to make these tests early to allow time for deliveries. Limestone should be put on at least six months ahead of clover seeding.

Linsley says that many farmers who have limed their land are not growing clover. Others are growing clovers only once in eight or ten years. Many of them expect profitable increases of corn and soybeans even though no clover is grown in the rotation, but it just doesn't happen.

Even though Illinois farmers set a record in limestone spreading a year ago and have now limed some seven million acres of acid land, the growing of clovers is a "must" if full benefits are to be received.

LOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 7½ minutes

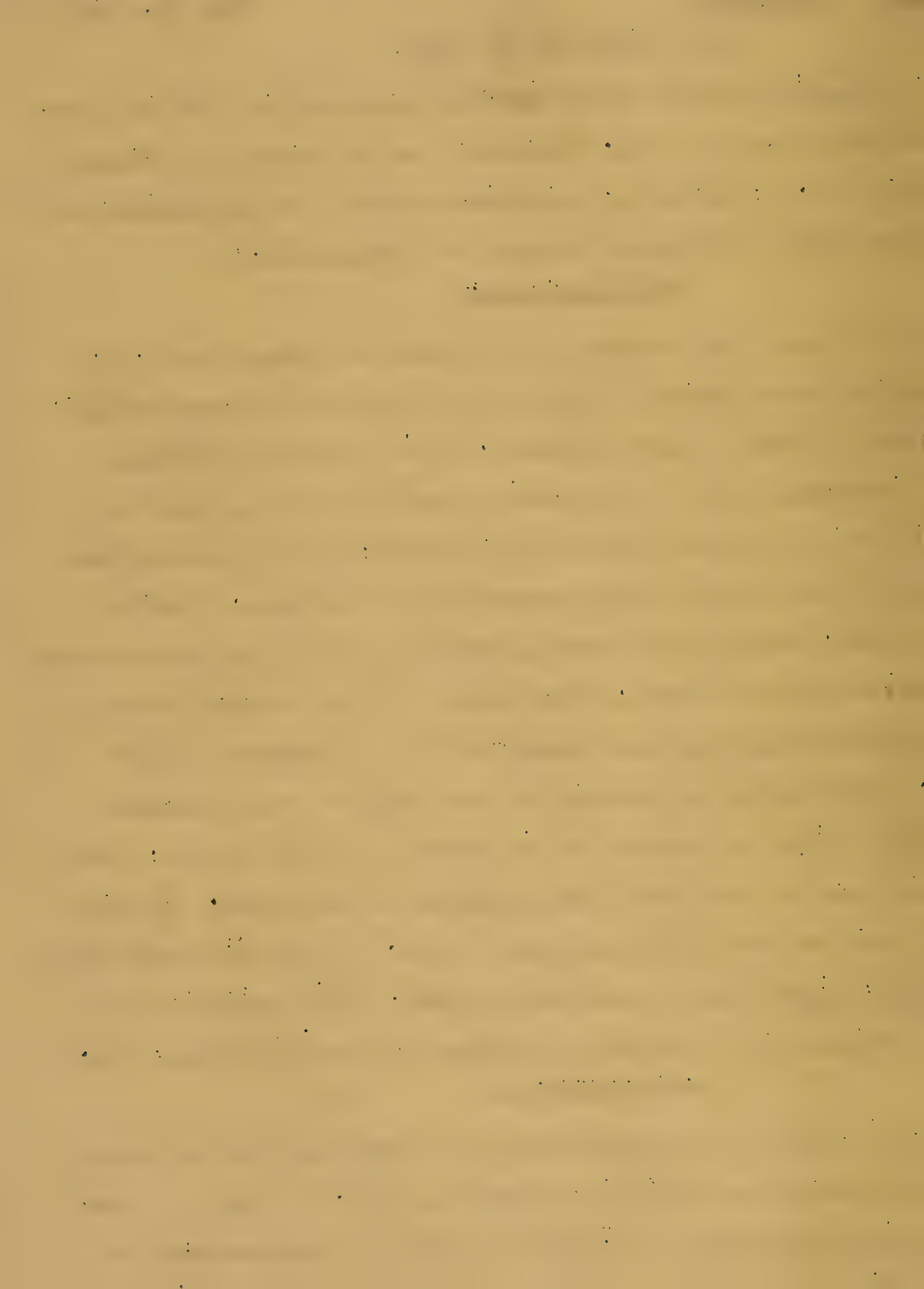
June 17, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture.)

(:45) Here's our victory garden item for today from H. B. Petty, extension entomologist, University of Illinois College of Agriculture and State Natural History Survey. It's about the European corn borer, something a lot of us didn't expect to meet up with so soon. But if you have sweet corn in your garden, now's a pretty good time to look it over carefully for egg masses of the pest. You'll find them in flat, shiny white masses, probably 15 or 20 eggs to a mass on the undersides of the leaves. This should be done within the next few days. One Champaign gardener reported 40 or 50 bunches on 120 feet of row. This matter of picking off the eggs on small patches of corn works about like the control of the Colorado potato beetle. Where you don't have such a large crop, hand-picking is advisable. So just go down your rows of sweet corn and have a look. If you find any small bunches of eggs, pick them off and destroy them. It's going to save you a lot of trouble later and save you some good roasting ears, too.

(1:15) Army worms and cutworms are beginning their attacks in some spotted areas over Illinois, according to H. B. Petty, extension entomologist, University of Illinois College of Agriculture and State Natural History Survey. These worms not only are bothering small gardens but are of consequence in field corn production. This year,



because of the late season, replanting is highly impractical and every attempt to control these pests should be made.

and
All farmers know cutworms/army worms and the damage they do. Some cutworms cut the plants below the surface and in this case little can be done to control them. However the army worms feed on the leaves of the corn and can be controlled. Cutworms that cut the plants at the ground level can also be controlled, as can those that feed on the leaves. An effective way to control these pests is by the use of a poisoned bran bait. Here is the formula for the bait. You may want to take it down just in case: Four pounds of white arsenic or Paris green, 100 pounds of bran and two gallons of lubricating oil, SAE number 20.

Mix the chemical and the bran thoroughly. Then add the oil and stir the mixture until every bit of bran has oil on it. Broadcast this poisoned bran bait at the rate of 10 to 15 pounds to the acre. If you notice outbreaks of these pests, contact your farm adviser or write to this station for a free copy of the bulletin 442 on army worm control.

Do not leave old sacks lying around where livestock can find them, as they have been known to be poisoned by chewing on these sacks. Army worms, small striped cutworms, clayback cutworms and black cutworms are the most common this year. Black cutworms, Petty says, will be worse on ground that has had water standing on it.

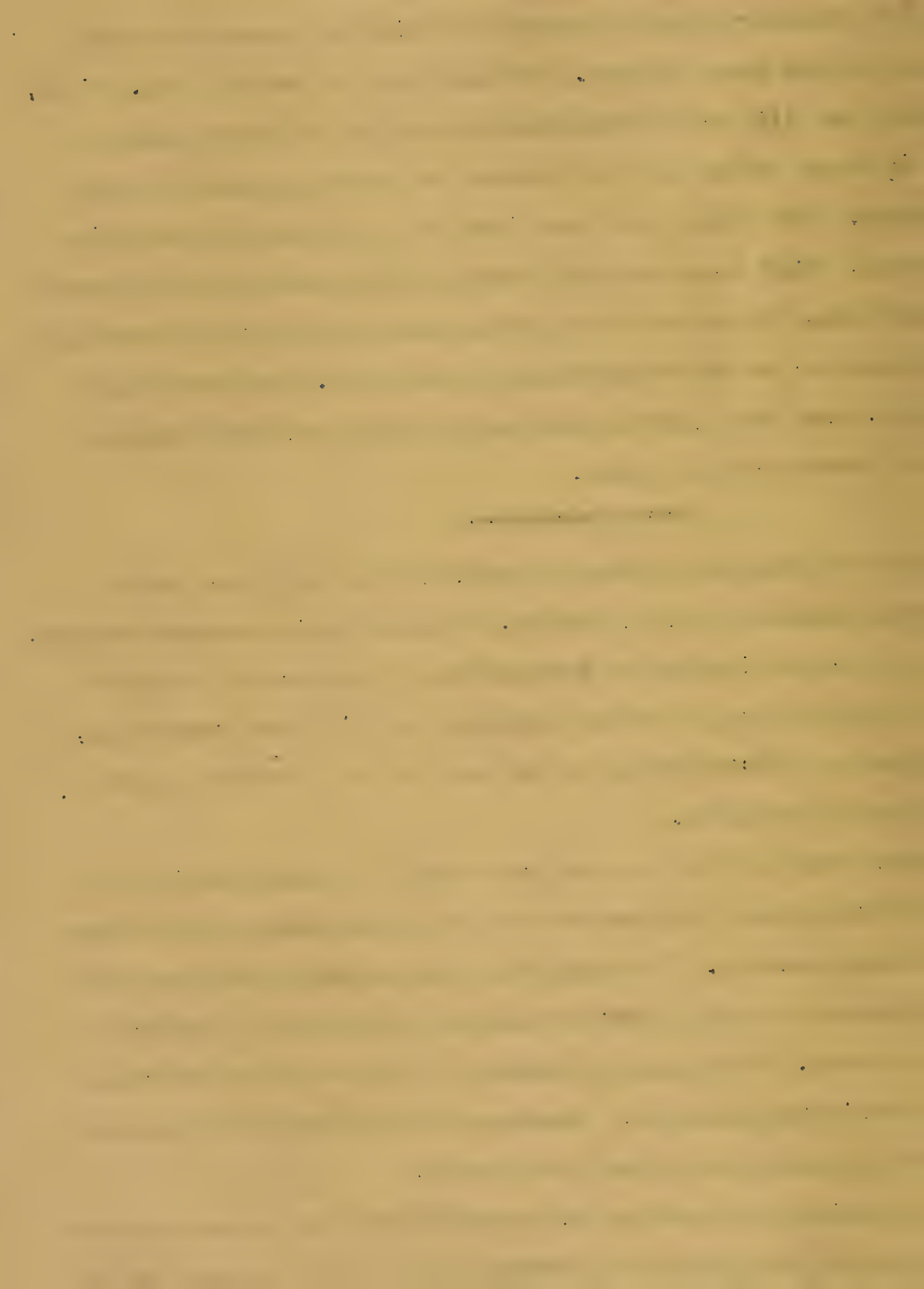
(1:00) A number of questions are coming in from Illinois farmers concerning the advisability of cutting timothy, redtop hay and bluegrass for cattle feed. In checking with W. B. Nevens, professor of dairy cattle feeding, University of Illinois College of Agriculture, it looks as if we'll have to cut something for cattle feed now that a

lot of our alfalfa and clover have been killed. Furthermore, redtop, timothy and bluegrass make fairly good roughage for cattle, if handled properly. You remember when we used to cut timothy around the Fourth of July after it had gone to seed. Perhaps some of us still do. Well, anyway timothy hay like that makes feed comparable to brown paper or shavings. In other words, cut the timothy or redtop before it gets brown and woody. The cattle not only like it a lot better, but it's better for them. That means cutting timothy and redtop for dairy cattle feed right now. There may be a little more difficulty in curing, if cut early, because of unfavorable weather conditions. But once they are well dried, they keep just as well as they do when harvested at the woody and low-feed-value stage.

(:50) Seeding Sudan grass in drainageways will stop soil erosion, in the opinion of E. D. Walker, extension soil conservationist, University of Illinois College of Agriculture. Farmers who failed to mow waterways this spring, or whose seedings haven't been successful, may seed 25 pounds of Sudan grass to the acre in any location where a good seedbed can be prepared.

Sudan grass at this time of year makes a rapid growth and will soon establish itself sufficiently to hold the soil in the waterway from seriously washing. In early fall mow the Sudan for hay and then seed a mixture of equal parts of timothy and redtop at the rate of 30 pounds an acre. Take care in working in this seed so the Sudan grass stubble won't be disturbed. Remember it will help hold the soil until the other grasses can become established.

The seeding of waterways and establishment of a good vegetative cover is one of the practices farmers may use to earn soil building allowances under the 1943 Triple-A program.



(1:20) Here's another example of neighborhood cooperation which is gaining popularity in farm work these days. This report, which comes to us from H. P. Bateman, agricultural engineer, University of Illinois College of Agriculture, shows how cooperation was carried on by three Champaign county farmers---Joe Bond, Paul Butlin and Robert Weeks.

A four-row corn planter available on one farm was kept in constant use on three farms during the planting season. Two hundred acres of corn were planted on three farms instead of the 83 on one. Three tractors from the other two farms made it possible to tandem disk the soil twice, harrow the seedbed and keep the planter operating. In addition, 70 acres of soybean ground were tandem disked---all of this during a period of six days.

The cooperative use of the machines permitted each of the men to complete the planting earlier as compared to each man working separately. The fields on one farm dried earlier than on the other farms and were completed by the time the other fields were ready to be planted.

Bateman suggests that more farmers plan to cooperate on such field operations as drilling beans, haying, combining, corn picking, hauling manure as well as other farm operations. In some cases, it may be necessary to determine whether fair exchanges of machines are being made. That is, one machine may cost more to operate than another. In such an instance, you'll find the rental schedule for machines a big help in solving this problem. Copies of the rental schedule, showing the rates that should be charged for the use of various machines by the acre or by the hour are available for free distribution. If you'd like a copy, just drop me a card here at _____ and I'll see that you receive your free copy of the rental schedule right away.

(1:10) Alfalfa growers in the southern third of Illinois should be on the alert for boron-deficiency symptoms on their second and third cutting crops, unless we have more than the average amount of rain for the rest of this summer. This report comes to us from C. H. Stinson, agronomist, University of Illinois College of Agriculture.

It has been found that the soils of the southern third of Illinois are most likely to be deficient in available boron. This deficiency is serious enough to limit production of red clover, alfalfa, lespedeza and alsike clover.

The most positive symptom of boron deficiency in alfalfa, regardless of the part of the state, is general stunting of plants with upper parts of the plants rosetted. Yellowing or reddening of the leaves should also be viewed with suspicion as an indicator of boron deficiency.

A simple application of common borax is the recommended practice. It can be purchased from any large commercial fertilizer concern and applied at the rate of 30 to 40 pounds to the acre. This may be done with a hand seeder or applied along with other fertilizers at this rate.

A mimeographed leaflet entitled "The Boron Problem in Illinois" is free for the asking. Address your request to _____, _____ that _____ and I'll see/you receive your copy right away. Ask for the leaflet on boron. That's spelled b-o-r-o-n.

(:25) You folks who have set strawberries in your garden for the first time will want to keep in mind not to let them bear fruit this year. Pick off the blooms, in other words. Allowing annual bearing varieties to bloom and bear fruit the first year weakens the plant and delays formation of runner plants which will bear the crop in 1944,

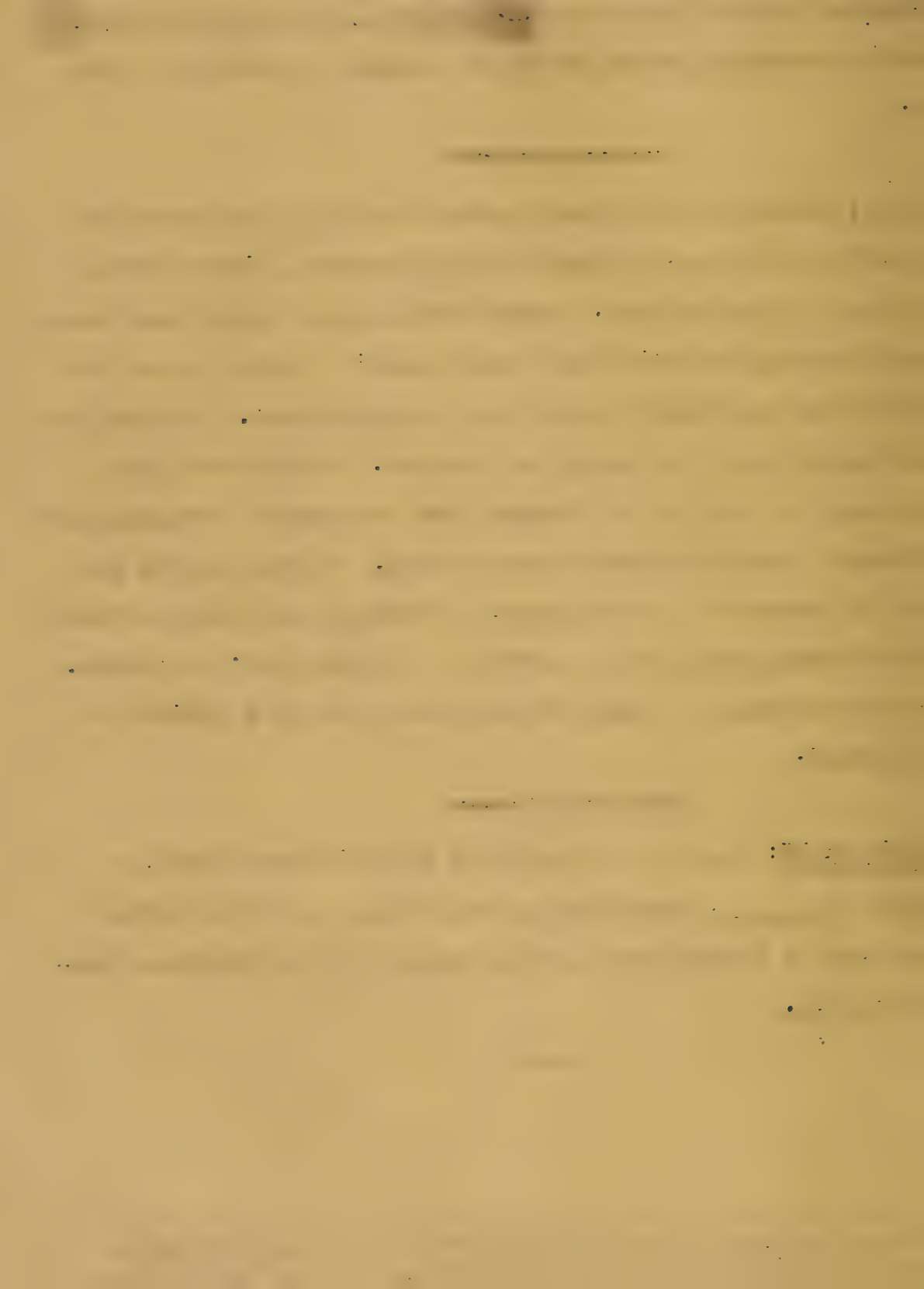
according to V. W. Kelley, extension horticulturist, University of Illinois College of Agriculture. So walk through your patch and pick off any blooms or berries that appear. However, this does not apply to ever-bearing varieties, which should be allowed to bear fruit the first year.

(:30) Illinois Transparent growers are urged to watch for apple drop by V. W. Kelley, extension horticulturist, University of Illinois College of Agriculture. Yellow Transparent apples have been known to drop severely in this state when there's a lot of water in the soil. This is especially true if the weather's hot. Dropping may occur before apples are ripe enough to harvest. Kelley says that growers will want to keep on the lookout for evidence of dropping and apply a "hormone" spray as soon as drop starts. Hormone sprays are effective on all summer varieties grown in Illinois and will be found useful in lengthening the harvest period if a labor shortage occurs. For further information on hormone sprays, see your farm adviser or write this station.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914



1161

Cap 1

FORTY-NINTH

ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture)

Speaking time: 5½ minutes

June 21, 1943

(FOR BROADCAST USE ONLY)

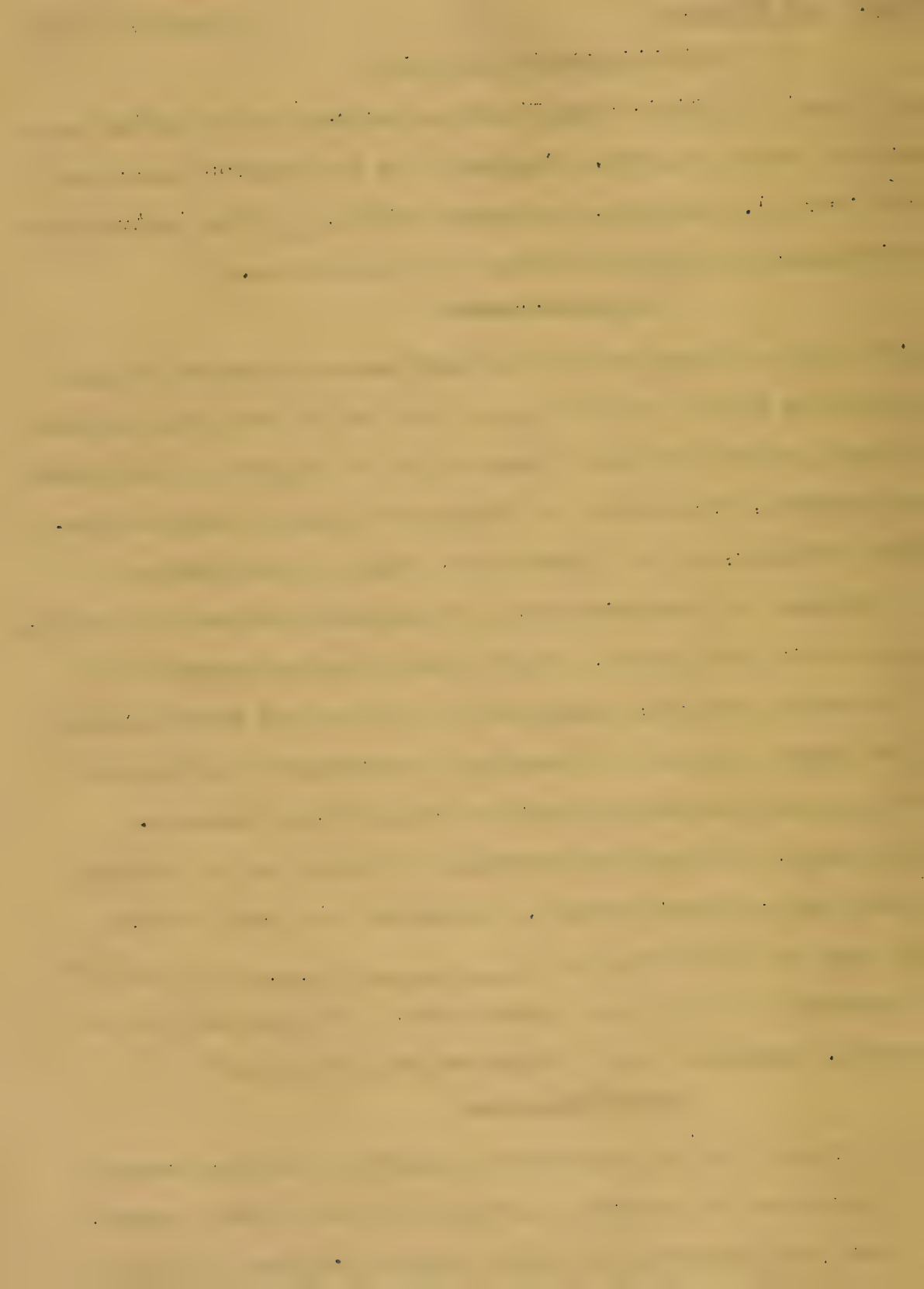
(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture.)

(:45) We're going to need to fight animal diseases to meet production goals in 1943. And it's with that end in view that circular 557 has been prepared by staff members of the department of animal pathology and hygiene, University of Illinois College of Agriculture.

This circular, fully illustrated, lists and describes seventy-nine diseases of farm animals. It includes diseases of cattle, swine, sheep, poultry and horses. You'll also find information on nutritional diseases, external parasites of poultry and miscellaneous facts, such as common weights and measures, approximate equivalents of different materials and suggestions on disinfecting premises.

Personally, I'd say that circular 557 would be an excellent addition to your agricultural library. Remember it's free for the asking. Just drop me a card here at _____, _____ and I'll see that you receive your free copy right away. You may call for it by name or number, circular 5-5-7, "Fight Animal Diseases."

(:50) There's a good opportunity awaiting you high school boys who are interested in earning a little extra money this summer. Northern Illinois pea canneries are still asking for boys 15 years of age and older to work in the harvest now under way. I'd suggest you contact the county farm adviser or your USES office and find out more about it, how to get there, where the help is needed and other details.



P. E. Johnston, state supervisor of the U. S. Crop Corps program, reports that high school boys have performed creditably in similar tasks earlier in the year. For instance, he cites the case at Hoopeston, Illinois, where the asparagus crop of one cannery was saved, thanks to school boys and girls. Ninety-eight per cent of the labor used in the asparagus harvest was school boys and girls. Furthermore, the employer said their work was quite satisfactory and wouldn't hesitate a moment to use them again.

There's work in sweet corn fields following the pea harvest. So you boys and girls who are eager to contribute more of your efforts to the food-for-freedom program, and at the same time get paid well for doing it, contact your county local USES office right away for further information.

(1:00) More than 400 Illinois farms producing livestock, dairy and poultry products have been connected to REA-financed rural electric lines under WPB's latest farm service connection regulations, according to reports received by the department of agricultural engineering University of Illinois College of Agriculture.

A year after rural line construction had virtually been brought to a halt by material shortages, the WPB liberalized its service connection regulations in the latter part of January to permit rural electric systems to extend service to nearby farms using at least one of a number of electrical devices. These included water pumps for livestock, milking machines, milk coolers, brooders, incubators, feed grinders and milk equipment sterilizers. Subsequent WPB orders reduced the number of animal units required for service from ten to five for each farm and made farmstead wiring available to the farms. These orders have increased the number of Illinois farms that will receive electricity under WPB's farm service connection regulations.

The 27 Illinois rural electric systems financed with funds borrowed from REA furnish electricity to more than a third of the electrified farms in the state.

(1:05) I realize none of you are going to be seeding any sweet clover until next April or March, but I thought you might like to find out some more about the crop in the meantime. There's a new circular off the press at the University of Illinois College of Agriculture called "Sweet Clover in Illinois," circular 559. It's free for the asking.

Of course, more of us should be growing sweet clover. You know, it really has no superior as a soil builder. When it's used as a green manure, you can plow it early in the spring of the second year when it's four to six inches high. It's a good pasture crop, too, and provides a long period of grazing during the second year. It yields abundant forage, and is readily available to Illinois farmers because many of them grow it so extensively for soil building.

Don't seed it on sour soil, however, as it's almost certain to fail. It's also a mistake to clip or pasture sweet clover heavily in the fall of the first year if you want to get the most from it the second year. Early seeding and inoculation are also important. The usual seeding dates are late February and early March in the southern part of the state and late March to early April in northern Illinois.

Now, remember, if you'd like a free copy of "Sweet Clover in Illinois," just drop me a card here at _____, _____ and I'll be glad to send you one. You may call for it by number, circular 5-5-9.

(1:15) Now for some answers to questions Illinois farmers are asking of crops men at the University of Illinois College of Agriculture.

A number of letters are coming in on the control of Canada thistle. You know, it's one of the 32 most troublesome weeds in the state and is listed in both the Illinois weed law and seed law. It's found in all parts of the state, but is most common in the northern part. By the way, it blossoms from June to August. You'll easily recognize it by the cluster of purple to white blossoms and spiny leaves. It can be controlled by growing alfalfa as a smother crop, by fallow cultivation, by using chlorates on small areas and also by cutting not later than when the first blossoms open to prevent seed production. Incidentally, we have a leaflet on the control of Canada thistle. If you'd like to receive a copy, just drop me a card here at _____, _____ and I'll be glad to send you one.

Now a number of Illinois farmers are asking about millet as a substitute for clover and alfalfa and also about its feeding value. Well, the feeding value of millet grain is about comparable with corn. As for the hay itself, it's about like timothy or bluegrass.

Finally, here is that question coming in every year from many farmers asking whether or not they should drill soybeans or seed them in rows. Of course, you save a little seed when soybeans are seeded in rows. And agronomists advise that you seed in rows, providing your field is inclined to be weedy. If it isn't weedy, you might just as well drill them solid. As for the yield, it's a tossup.

(1:15) Quite a number of you folks have been asking if it's all right to use new seed potatoes for your late planting. Well, we've called on J. P. McCollum, horticulturist, University of Illinois College of Agriculture, for the answer and here's what he says:

If new potatoes are to be used for seed, it will be necessary to break the rest period in order to prevent delayed uneven sprouting. There are a number of ways you can do it. You can store

the uncut seed for three or four weeks at a temperature of 90 to 95 degrees. That's rather a slow process, of course, so chemical treatment is used quite extensively to hurry the job along. Materials found to be most effective are ethylene-chlorohydrin or sodium thiocyanate.

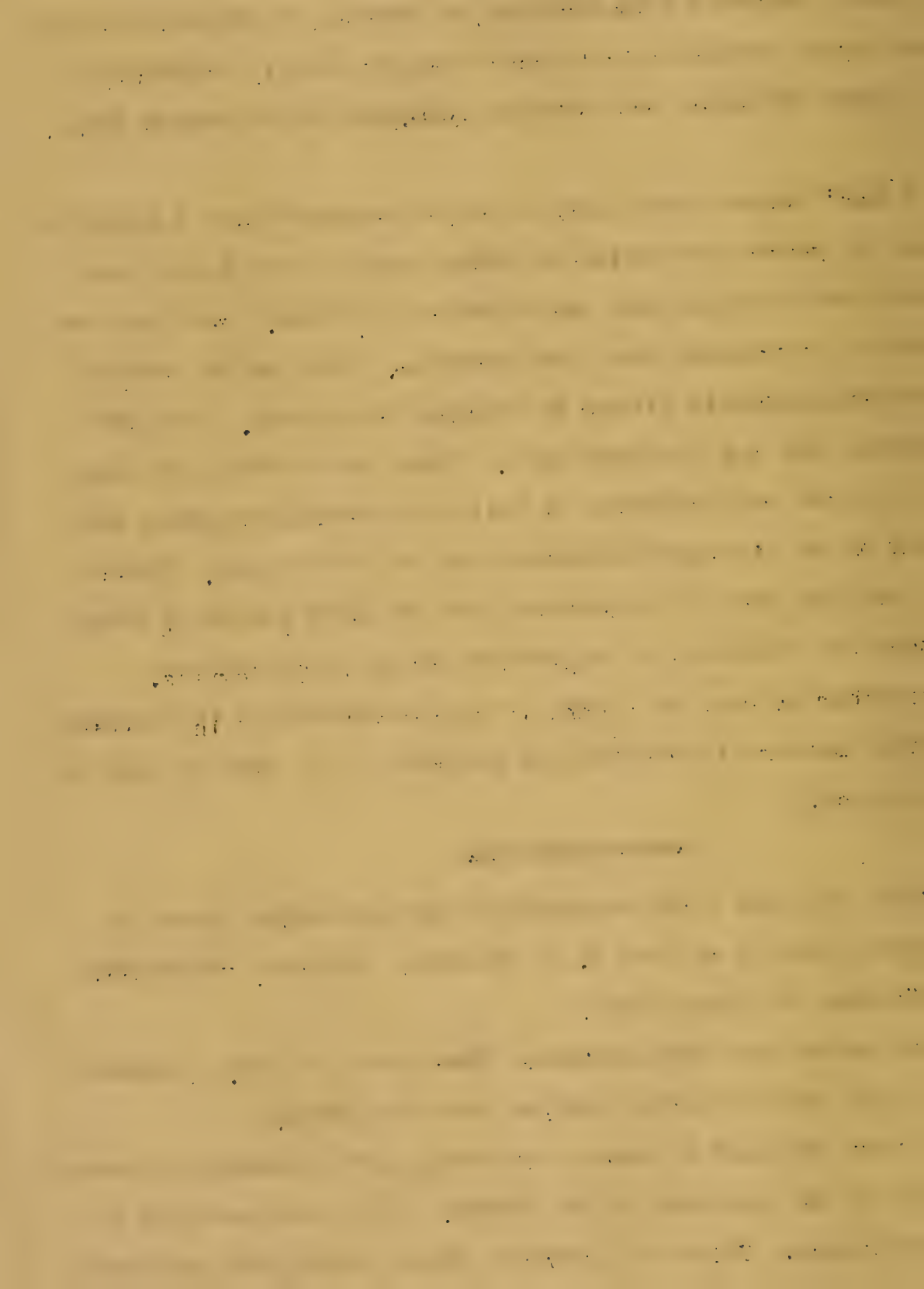
I don't expect very many of you to remember such a mouthful as that, but if you're interested in using them drop me a card and I'll tell you how to spell them and where to get them. Just ask for the information on treating new seed potatoes. Seed may be treated with ethylene-chlorohydrin either by soaking or gassing. I'm just going to mention the way you soak them. Place the freshly cut seed potatoes in a 6 per cent solution of this ethylene-chlorohydrin and then put this in an air-tight container for 24 to 48 hours. That's better than waiting three or four weeks for the rest period to break where potatoes are stored at a temperature of 90 to 95 degrees.

Remember to drop me a card if you're interested in learning more about this matter of treating new potatoes to be used as seed in your late planting.

(:35) Here are a few suggestions for preventing fires in our woods which come to us from W. F. Bulkley, forester, University of Illinois College of Agriculture.

Plow under your crop residue. Don't burn it off. Remember our fire may get out of control and run into the woods.

If your woodland is near a railroad, plow a number of furrows long the edge of the woodland in the spring. Plow them parallel to the tracks, of course. This will prevent engine fires from spreading into your woodlands.



For early spring and late summer fires, have your fire tools ready where you can find them. A shovel, wet bag and a plow will do the job.

Your woodland will pay you well if you give it a chance. Keep your fires burning to furnish heat where needed, but not in the woods, Bulkley says.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.



FIFTIETH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 5:25 minutes

June 24, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information mentioned may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture.)

(:45) Farmers who wish to work longer than daylight hours but can not buy new light, battery or generator outfits for their tractors are installing used generators, batteries and automobile lights that can be obtained from automobile junk yards. There are a number of general methods of driving the generator for this type of hook-up, according to R. C. Hay, agricultural engineer, University of Illinois College of Agriculture. The generator may be driven by means of a longer fan belt or directly from the tractor pulley. This latter method can be arranged in a shorter time. On some older tractors a pulley may be mounted on the main drive shaft between the clutch and transmission. In some cases where an extra driver is available, the use of lights can increase the output by plowing and disking by as much as 50 per cent during the rush season, Hay says.

(1:15) It doesn't look now as if we're going to have any more protein supplements next year than we had this year. So we might as well prepare for next year now, in the opinion of W. E. Carroll, head of the animal husbandry department, University of Illinois College of Agriculture. He believes considerable improvement can be brought about on individual farms if thought, planning and effort are applied to this problem.

Let's first look at the facts if we have clover and alfalfa on the farm. In that case, give haymaking the "right of way" when the season comes. Harvest the crop early before it becomes too coarse and woody and loses some of its protein. Cure it carefully in order to retain all leaves and cure it well enough to prevent spoiling in storage. Leaves contain three times as much protein as stems do. Remember to store this hay where it won't be damaged by weather or animals.

Now if you have no alfalfa or clover on the farm, let's look at it this way. Sow a legume crop with oats next spring. Of course, the ground must be capable of growing legumes. Red clover, biennial sweet clover and lespedeza are suggested in the southern half of the state. Legumes will have a better chance if oats are cut at the "hay stage" instead of being allowed to mature for grain. Grow an extra acreage of soybeans for hay, to be seeded early and harvested before the leaves begin to fall and before fall rains set in. Cowpeas can be similarly grown in certain sections of the state.

These suggestions, along with others, are contained in leaflet 383 on priorities for protein in animal production, revised for May. Copies are available for free distribution by addressing your request to this station. You may call for it by number 1-3-8-3.

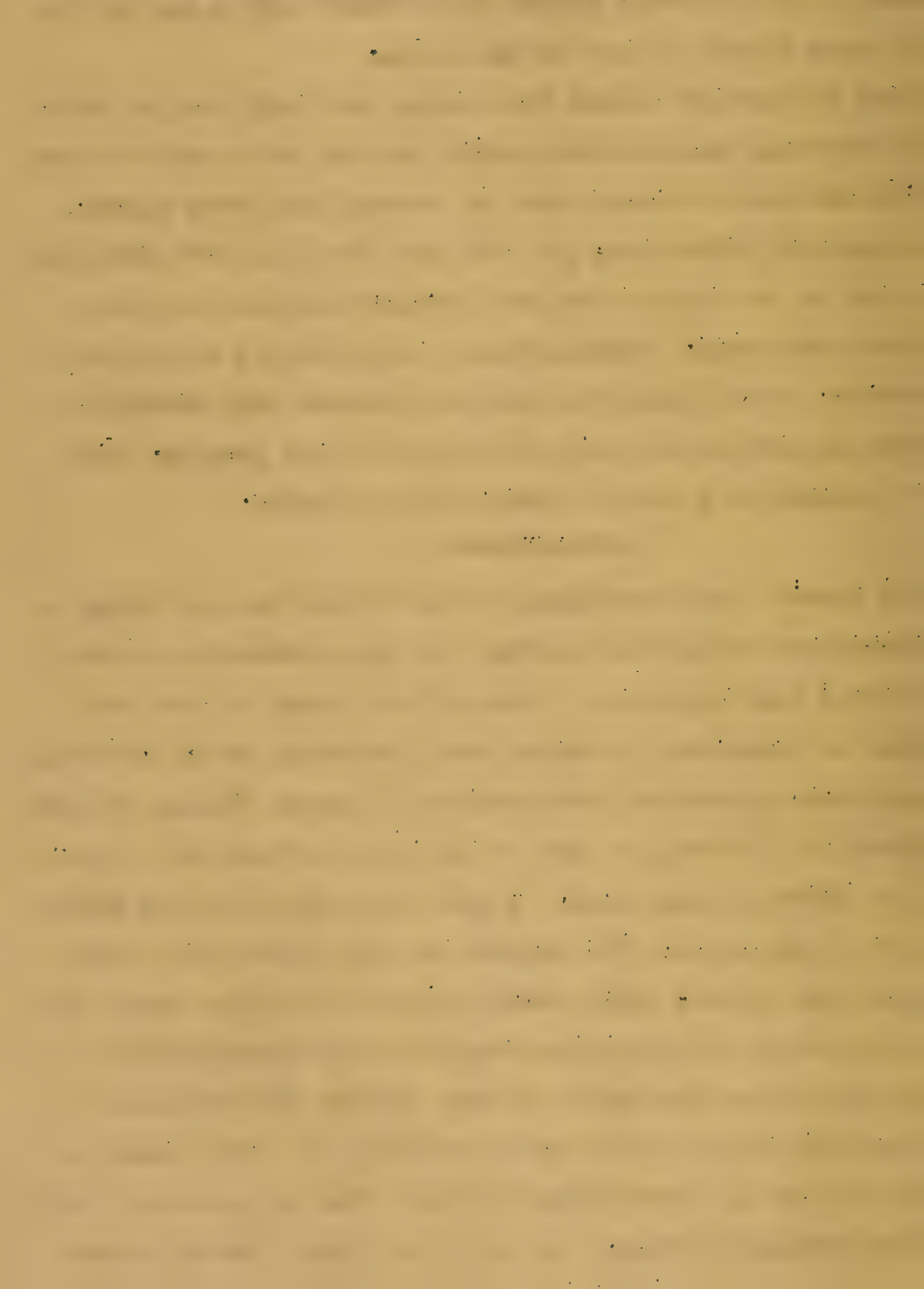
(1:00) "A little patch of fall sown rye can save the feed bills by and by," says H. G. Russell, livestock extension specialist, University of Illinois College of Agriculture.

In the case of sows and litters, rye pasture experiments show there's an appreciable saving in grain, a 50 per cent saving in supplement, pigs are healthier and more pigs are weaned a litter. Good rye pastures will carry eight to 10 sows and their litters for each acre

until rotation pasture is available. Experiments also show that thin steers, wintered on bluegrass, gained three pounds each a day for the first eight weeks on rye pasture in the spring.

A good rye pasture seeded this August will help you get those pigs out of farrowing quarters next spring and the cattle out of muddy lots. You'll cut down on chores when the spring field work begins. So select a piece of ground now, get your rye seed when it's available and plan to sow at the rate of one and one-half bushels an acre in August or early September. Russell says a field where a silage crop has been removed, a field used for temporary pasture this summer or a field of soybeans cut for hay will be adapted to this program. Just remember rye pasture is a valuable labor and feed saver.

(:45) Here's a real challenge to all farmers who are trying to set new wartime pork production records: In the average-size litter each pig farrowed dead represents a loss of 140 pounds of feed from the standpoint of production of edible meat, according to H. G. Russell livestock extension specialist, University of Illinois College of Agriculture. Normally 35 to 40 per cent of the pigs farrowed die at farrowing time or before weaning time. A good standard or goal is eight pigs weaned for each litter. The average is only slightly more than six weaned for each litter. This would indicate production costs for the larger litters are substantially lower when the carrying cost of the sow is prorated over the number of pigs weaned. An average of eight pigs for each litter weaned and a production of 1,600 pounds of pork for each sow in six months from farrowing time are practical goals which the best producers attain. On most farms where this is accomplished, Russell says, there's strict observance of the sanitation system, and portable housing equipment is used.



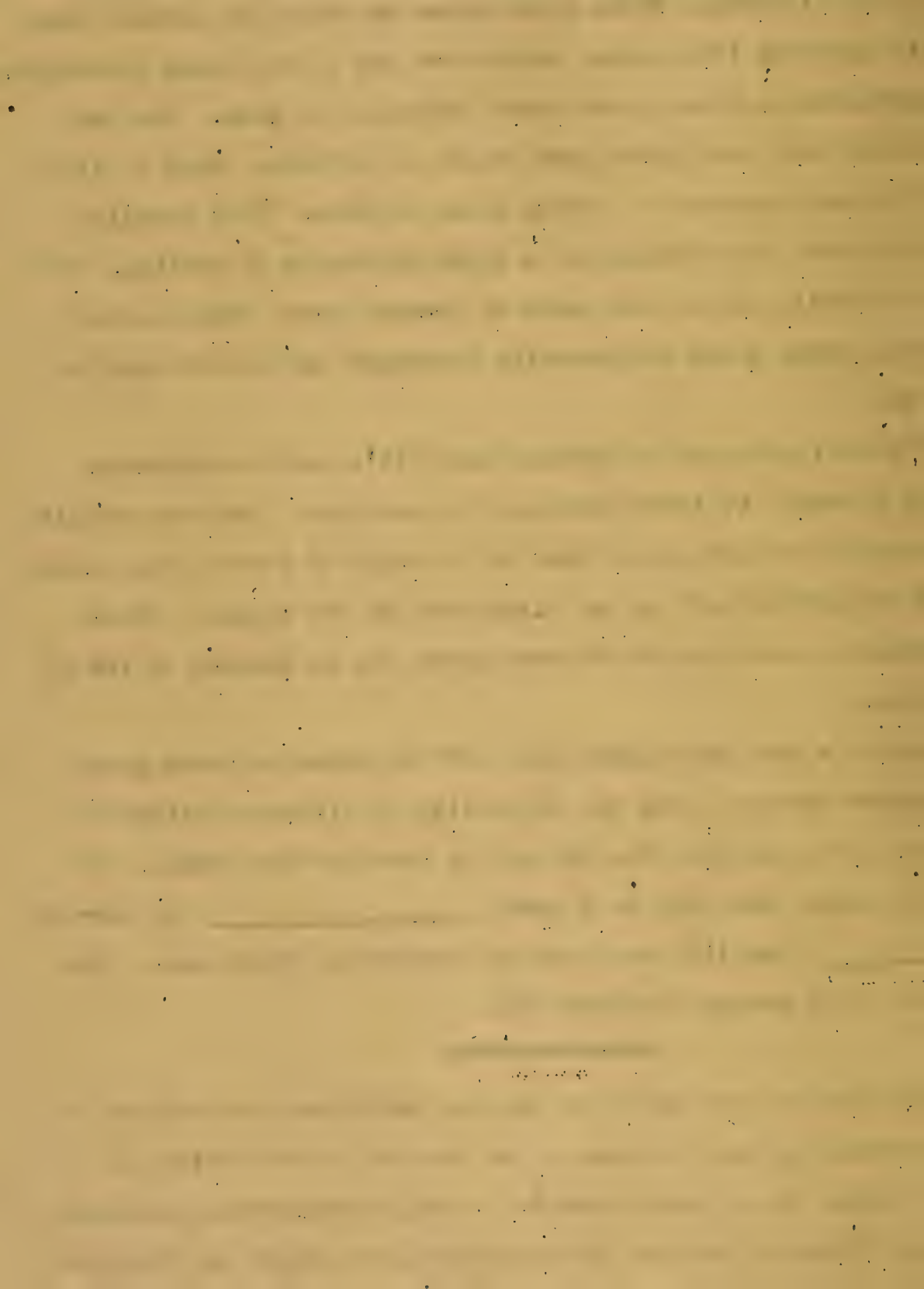
(1:10) It looks as if brome grass is going to become a popular forage crop in Illinois. Brome grass makes an excellent pasture when seeded with alfalfa; it's hardy, nutritious and a long-lived perennial.

Furthermore, brome grass isn't difficult to grow. You can grow it on any soil that gives good yields of alfalfa. Seed in late August or in early spring on a firm, clean seedbed. It's usually broadcast by hand, then covered by a light harrowing or rolling. If sowed with a drill, mix it with oats or cracked corn. When seeded with alfalfa, brome grass is generally broadcast and alfalfa drilled on top of it.

It's advisable not to pasture until it's well established. Once it has a start, it isn't difficult to maintain. For best results the stand should be kept grazed down to a height of four to six inches and a good top growth left on the field most of the season. Under good management a good growth of brome grass can be counted on for an entire season.

There's a new publication just off the press on brome grass and brome-grass mixtures from the University of Illinois College of Agriculture. It's bulletin No. 496 and is free for the asking. If you'd like a copy, just drop me a card, _____, in care of _____, and I'll see that you receive it right away. You may call for it by number, bulletin 496.

(:30) You tractor operators who are using the new fuel now on the market should be sure to warm up the tractor before trying to pull heavy loads. In a report from R. C. Hay, agricultural engineer, University of Illinois College of Agriculture, he points out that the fact a tractor will start on this fuel doesn't mean it can be made to



pull a heavy load before its motor is warmed up. Failure to do this may result in serious harm to the motor. This new fuel is just as dangerous to use as gasoline, too, so let's handle it with the same precautions.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914



FIFTY-FIRST ILLINOIS FARM FLASH (From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 4:45 minutes

June 28, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, arranged as a public service for your use as you see fit. Mail requests for information to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois, Urbana.)

(1:00) June pigs are probably the easiest to raise of any pigs farrowed around the calendar, in the opinion of Damon Catron, associate in animal husbandry, University of Illinois College of Agriculture. Furthermore June farrowing has become a popular practice with many Illinois farmers who find themselves with a minimum amount of equipment.

However, there are some precautions to keep in mind in raising June pigs, even though we carry out the same good management practices followed for pigs farrowed in February or March. Be on hand when those sows farrow. Remember you're dealing with 14-cent hogs, Catron says. See that all pigs get to nurse. Ear-mark them for identification. Select breeding gilts at weaning time and choose the heavy ones. Treat the naval of young pigs with iodine. Remove tusks if necessary, cutting off about two-thirds of them. Castrate at four weeks, vaccinate at six weeks and wean at eight weeks. Be sure to get these June farrowed pigs out on good pasture with plenty of water and shade. In fact, farrow them out there if at all possible.

If we keep these things in mind we'll save every one of those June pigs for producing more pork to help beat the Axis.

(1:00) Here's a call to everybody who keeps bees.

Our military forces use a lot of beeswax right on the fighting fronts. Beeswax goes into a coating to protect and lubricate shells, and into protective coatings for our fighting planes. It is also used in plane models, in dental work and on thread for sewing shoes for soldiers and sailors. Some beeswax is used in waterproofing canvas, in waxing cables and pulleys, in adhesive tapes, varnishes, polishes and in many other things, including medicines and ointments.

All told, our fighting forces use upwards of a million pounds of beeswax a year.

Up to the war, we imported more than half our beeswax from other countries. With the shortage of shipping space, we can no longer bring in as much wax as we need. We must depend more on beekeepers here at home.

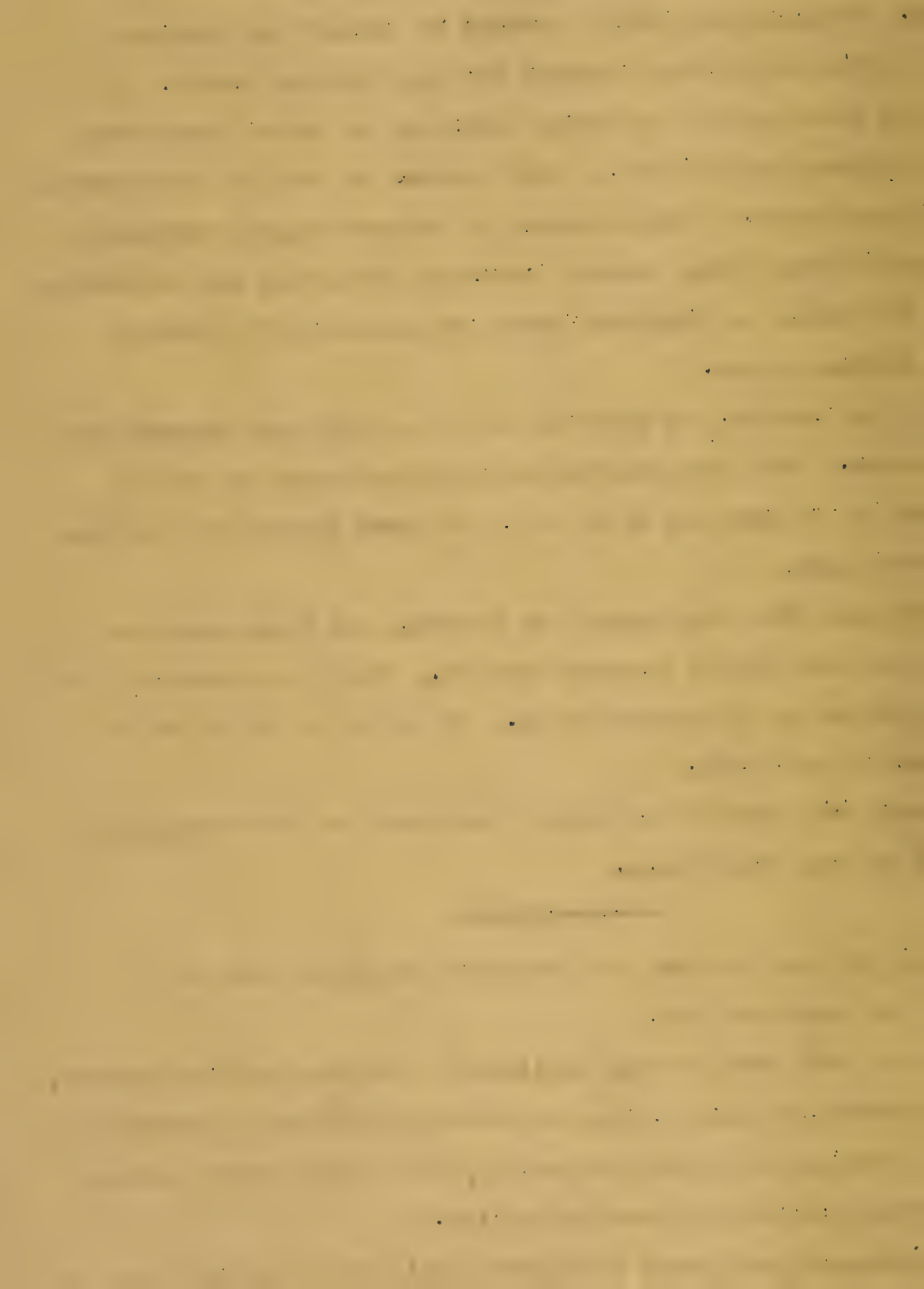
To meet this big demand for beeswax, all beekeepers are urged to save every bit of beeswax they can. Cull poor combs out of the hives, gather up all scraps of wax. No matter if it's just a pound or two, it will help.

Sell this wax to the dealer from whom you get beekeeping supplies or to some other buyer.

(1:30) Here's a way for everybody who keeps bees to do a service for our Army and Navy.

In a good share of the millions of beehives in this country, some of the combs are doing little more than serving as a nursery for drones. The wax in these combs is badly needed right now in making dozens of items for our soldiers and sailors.

Beekeepers are urged to go over their hives and cull out the poorest comb in each ten. Cull out the combs that have large patches



of drone cells. These drone cells are good only for storage. They are the last to be filled. What's more, drones don't make honey, and a large number of drones means more bees to feed on the honey supplies. Also cull out the crooked combs, broken combs and combs the mice have chewed. Replace them with sheets of foundation to obtain the better-built combs during this year's flow of honey.

Right now while the new flow of honey is coming on is the ideal time to cull. The bees can build more new combs now than at any other time. The culling will not seriously cut honey production.

Culling poor combs is a paying practice at any time. With good worker combs, bees can work more efficiently, hives have fewer drones to eat honey the workers make and the bees are less likely to swarm. With wax bringing 41 1/2 cents a pound cash and 43 1/2 cents in trade, culling also pays in dollars and cents.

But more important than the money from the wax -- or even improvement in the hives -- is the contribution beekeepers can make through providing wax for war needs.

With more wax needed for war materials and with less wax coming in from other countries, we need to depend more on wax from our bees here at home.

So cull the poor combs in your hives and sell the wax to the dealer from whom you get your beekeeping supplies or to some other buyer.

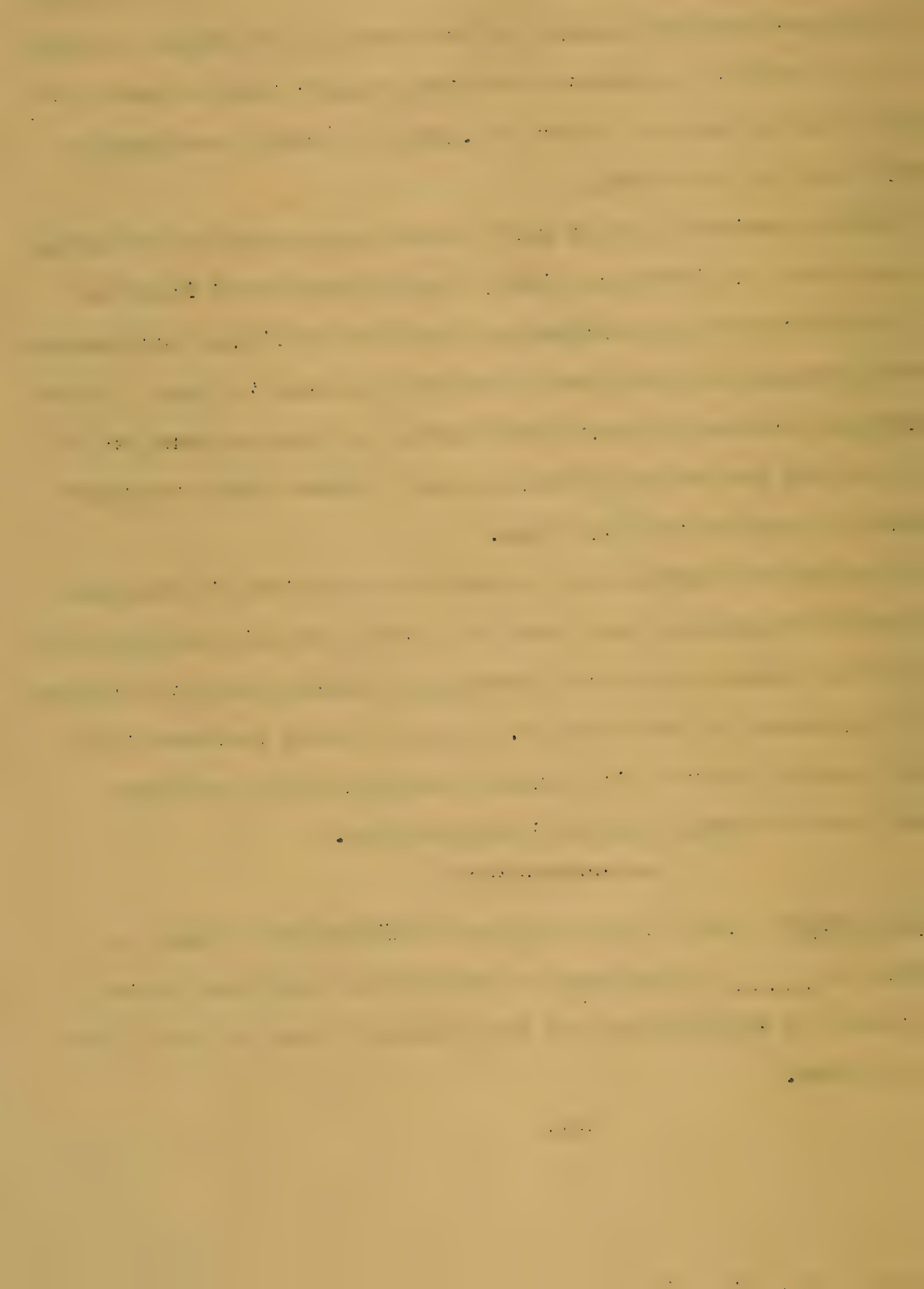
(1:15) The increasing numbers of pigs in the country and the decreasing supplies of corn suggest that there may be too many fall pigs raised this year, states E. T. Robbins, livestock extension specialist, University of Illinois College of Agriculture. In many cases sows which have raised late spring pigs should be fattened and sold after weaning their litters.

Pigs born after October 1 usually have a hard time of it anyway. They suffer from cold in winter. Next winter they will suffer, too, from poor rations because of the shortage of animal proteins in feeds. It is better to market a sow this summer than to have her consume more feed to raise a litter of runts for which there may be insufficient corn for fattening.

Robbins reminds us that most farmers were slow in expanding their hog business. In November, 1940, the University of Illinois College of Agriculture began suggesting that the declining hog numbers and increasing demand for pork justified an expansion in hogs. A few keen men promptly increased their 1941 spring pig crop as much as 50 per cent. Now they are reducing operations. Others spent two years thinking about it and "missed the boat."

A man may be fairly safe in his hog operations if his corn is now on hand and his probable corn crop will feed out all the stock he is producing this year. He can not count upon buying corn at a satisfactory price whenever he may need it. Also it would increase the national feed supply later on if farmers generally would not feed their present crop of young hogs to heavy weights.

LOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.



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FIFTY-SECOND
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture in cooperation with
(U. S. Department of Agriculture

UNIVERSITY OF ILLINOIS

Speaking time: 5 minutes

July 1, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here again is the ILLINOIS FARM FLASH arranged as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture.)

(1:00) With farmers working every available daylight hour and often many night hours, in their haste to get crops planted, costly accidents can be avoided if they'll remain safety conscious. Eighty-five per cent of farm machinery accidents are caused by faulty human behavior, according to R. C. Hay, agricultural engineer, University of Illinois College of Agriculture. Of course, faulty human behavior in this case is caused by fatigue and haste.

Keeping machinery in first-class working conditions so that a minimum amount of repair and adjustment need be made in the field ^{to} definitely contributes/safety. Likewise, the same is true of keeping guards and shields in place.

While emphasis has been placed on teaching safety to new farm workers this year, experienced operators must remember that a high percentage of farm machinery accidents involve skilled operators. While they have operated machines for years, they become careless and take unnecessary risks. It's especially important that older men be cautious in handling machinery. They might not be so quick in their movements as they used to be.

Let's keep in mind that a farmer killed or crippled this year represents a real loss to the production program of the nation. Remember, we can't afford to lose you.

(1:15) Here is our victory garden item for this morning on spacing tomatoes.

One of the temptations that victory gardeners will need to overcome is to set tomato plants too thick in their gardens.

It's easy to see tomatoes need more space than lettuce or onions. But how much more space is the question.

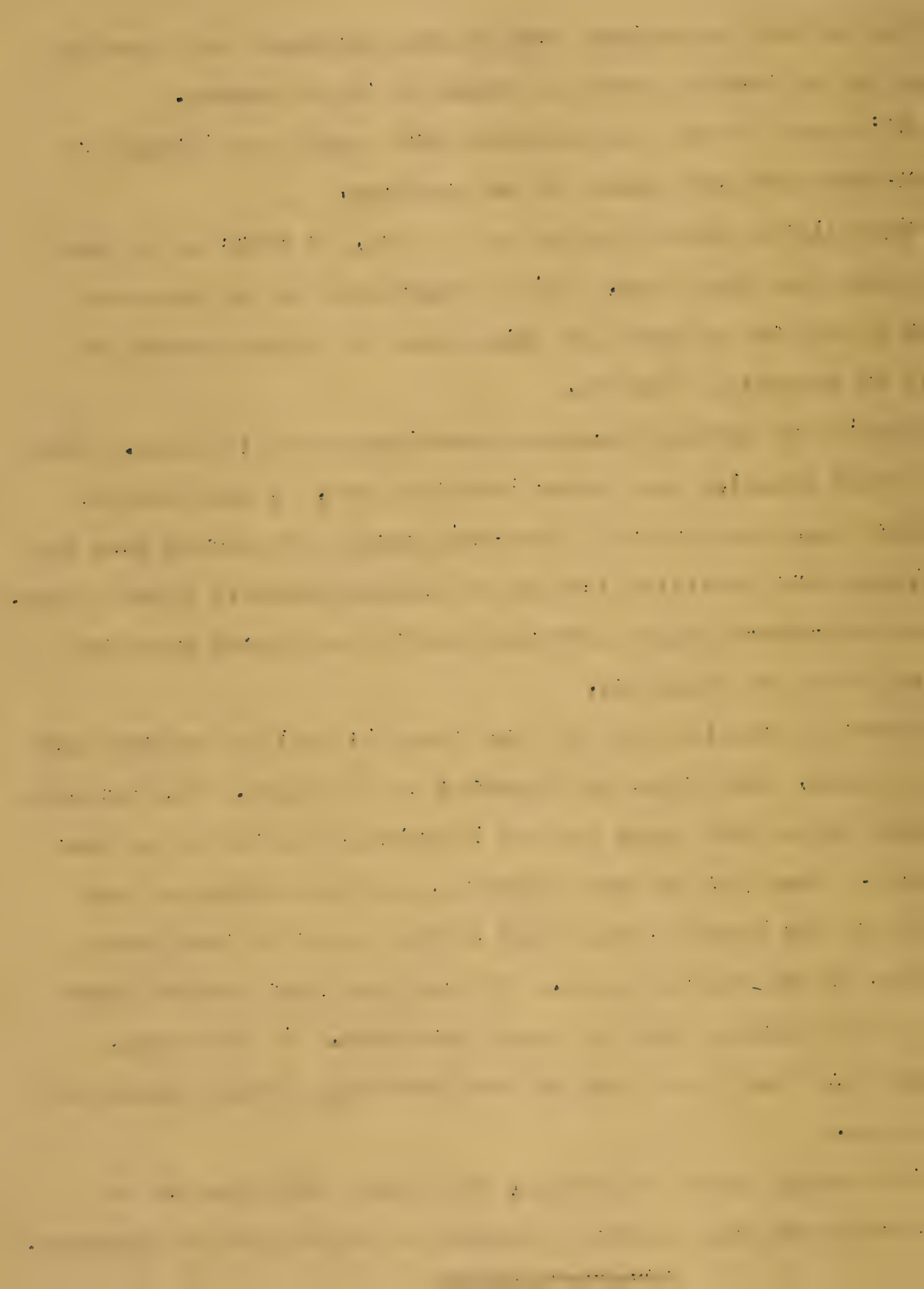
When little tomato plants are set out, it looks as if they have more space than they need. It's a temptation to the gardener to set them a foot or so apart and think when the plants become too thick he'll do something about it.

That's the difficulty--doing something about it later. When the plants start crowding each other it's too late. A good deal of harm will have been done by that time--the plants left should have had all the moisture and fertility instead of dividing them with other plants. Besides, the half-grown plants left are sure to be injured when the ones crowding them are taken out.

Garden specialists say if your space is limited and you want more tomato plants, then train the tomatoes up to stakes. You can make the rows about three feet apart and the individual plants in the rows two feet apart. When you tie the plants up, use wide strips of old rags. Pinch out the branches that come in the crotch of the leaves along the stem of the tomato plants. If you leave your tomato plants spread out on the ground, they will need more room. In that case, make the rows four feet apart and put the individual plants three feet apart in the row.

With enough space to develop, the plants will grow up to their normal size and will produce a bigger and better crop of tomatoes.

(:45) Victory gardeners who are raising sweet corn this year may wonder whether or not to take the suckers off their corn. Suckers



are the short stalks that grow out from the base of the main stalks of corn. These suckers grow out at an angle from the main stalk and are from a quarter to a third as long as the main stalk. They may not produce either tassel or ears.

Garden specialists say this,---if you want the suckers off the corn to feed to the cow or pigs, take them off early; you'll not materially reduce the yield of sweet corn ears. But don't take the suckers off along about the time tassels are forming or later, or you'll cut down the yield of sweet corn ears.

But if you've got something else that you'd rather do than take the suckers off the sweet corn--even sitting in the shade and resting--go ahead and do it, for you'll not get any pay for suckering the sweet corn.

(:45) Illinois farmers are urged to order their limestone early, take deliveries when the limestone quarries and railroads can deliver and when truckers can haul it. This report comes to us from J. M. Linsley, assistant professor of soils extension, University of Illinois College of Agriculture. Linsley points out that a number of farmers are having limestone delivered during the slack season and piled along the fence to be spread later when the field is ready. We must keep in mind that three and three-quarter million tons of limestone were spread in 1942, a million tons more than the previous year. This isn't a guess, it's the result of a careful and thorough survey made by the State Geological Survey. Furthermore, there'll be an increase in demand for limestone this year because farmers need clovers and alfalfa for feed and soil improvement and they know limestone is necessary on acid soils before these important legume crops can be grown. Many farmers who want and need limestone will probably be

disappointed because production of limestone is being limited by a shortage of labor. Then, too, many areas are short of trucks for hauling and spreading limestone. So order your limestone early and play safe.

(1:15) Livestock men are now thinking, whether they'll have enough hay and pasture to carry their stock next year.

When time comes to plant grass and legume crops this fall and next spring, stockmen may not be able to buy all the seed they need. So it's important to save all seed possible this summer.

Forage specialists say farmers who can spare the forage should consider setting aside a small patch of their hay or pasture land to harvest seed.

Farmers who do not have threshing equipment can go ahead and cut the seed crop and store it as hay. Then, they can do one of three things. If they can get threshing equipment later in the fall or winter, they can thresh the seed at that time. Or, if they can't get threshing equipment at all, they can store the crop as hay. Then, this fall or next spring when they get ready to seed hay or pasture crops, they can put the harvested crop with the seed still on it between layers of manure on the manure spreader and scatter it over the field. Or, they can spread the dry seed-holding plants without the manure. And they can sweep up and sow the seed that has shattered off in the barn. Scattering the dry seed-bearing plants over the field sometimes gives a poorer, and sometimes a better, stand than regular broadcast seeding. The important point is that it makes it possible for farmers who do not have threshing equipment to save and use some of their own seed.

Remember, make your plans for seed right away.

LOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture, and the United States
Department of Agriculture cooperating. H. F. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

ILCI
Cap. 1

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture in cooperation with
(U. S. Department of Agriculture

FIFTY-THIRD
ILLINOIS FARM FLASH

Speaking time: 5:40 minutes

July 5, 1943

(FOR BROADCAST USE ONLY)

ANNOUNCER: Here again is the ILLINOIS FARM FLASH, a public service arranged for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture.)

(:30) It's a good idea to be on the lookout for striped cucumber beetles in your victory garden. They're showing up now. Nearly everyone who has had any experience with this insect in past years knows it in sight-----a small beetle (about a quarter of an inch long) with yellow and black stripes on its back. It's a chewing insect, so that means we use a stomach poison. H. B. Petty, extension entomologist, University of Illinois College of Agriculture and State Natural History Survey, recommends one part of calcium arsenate and fourteen parts of burned gypsum. Many people use plain hydrated lime to repel the beetles, but this causes the plants to wilt severely in many instances. There are other insecticides which can be used, of course, but burned gypsum and calcium arsenate may be a little more easy to obtain and will "turn the trick" very well. So we'll use one part of calcium arsenate and fourteen parts of burned gypsum for the control of the striped cucumber beetle.

(:50) Here in the north-central states, hundreds of colonies of bees, particularly those that were neglected, died from starvation during the winter, according to V. G. Milum, entomologist, University of Illinois. The same was true during April and May when there was no

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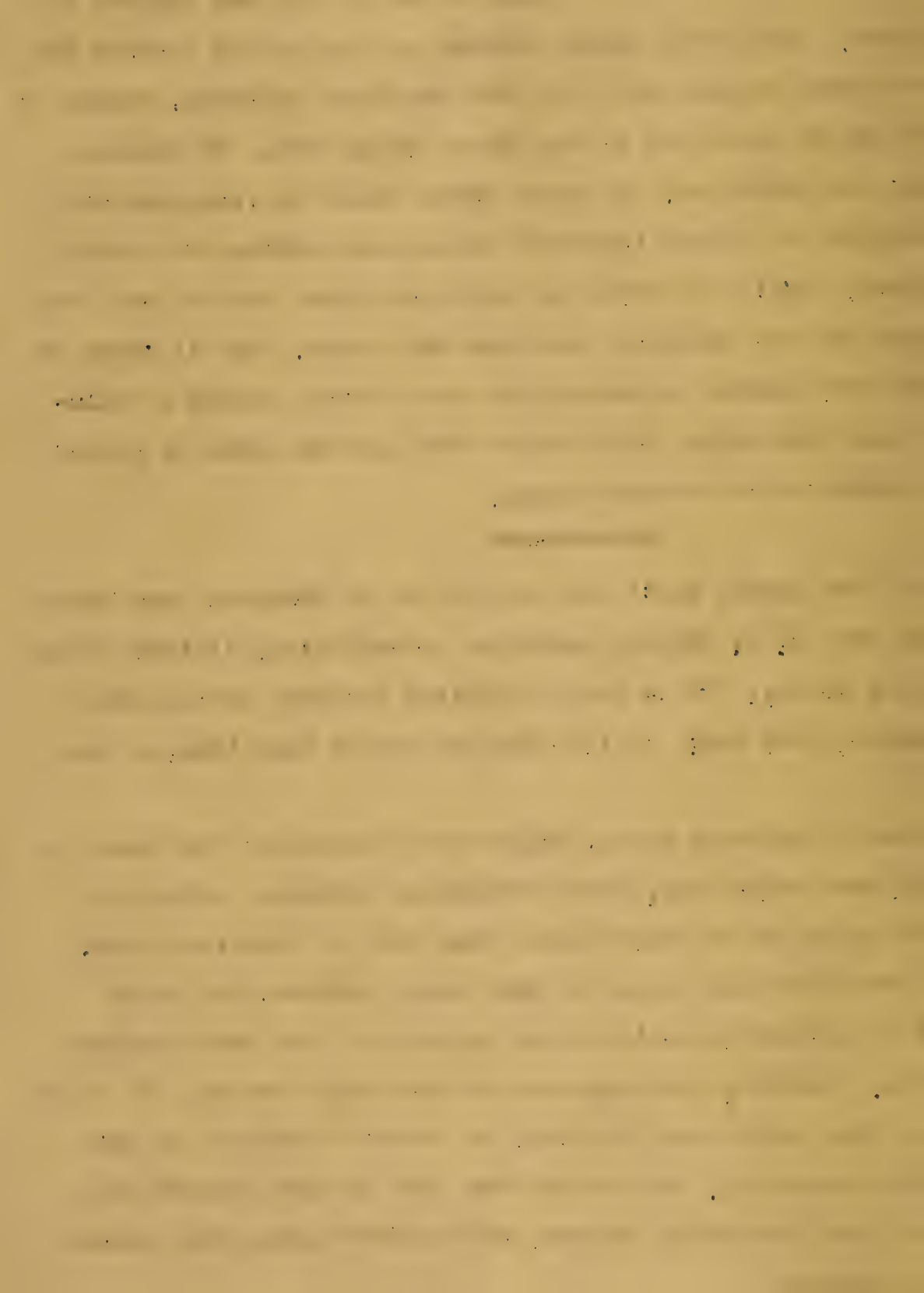
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opportunity for flight to gather nectar and pollen from dandelion and fruit bloom. Combs of these hives unprotected by bees are subject to wax moth injury. The larvae tunnel through and eventually destroy the combs. Where such colonies are free from American foulbrood, swarms of package bees may be installed in the hives, Milum says. If disease-free bees are not installed, the empty combs should be fumigated with carbon bisulphide at monthly intervals during warm weather to prevent wax moth injury. While the hives are empty is a good time to cull out the poor combs and cut excessive wax from the frames. By all means do not allow the moth larvae to destroy the two or three pounds of valuable wax in each hive body. It's better that all the combs be melted and the wax added to the victory hopper.

(1:30) The gamble isn't over as far as the European corn borer is concerned, says J. H. Bigger, associate entomologist, Illinois State Natural History Survey. If we have sufficient moisture during July and early August, look out! If it's hot and dry at that time, we may escape.

In heavily infested areas, Bigger even recommends that corn be plowed up and some other crop, such as Richland soybeans, millet or buckwheat, be seeded to at least insure some kind of livestock feed.

The corn borer has appear in very large numbers, and early planted corn in eastern Illinois is now carrying a very heavy infestation of larvae. However, the rainmaker did one thing for us. He eliminated much of the early corn planting, so there's a minimum of this heavily infested material. But at the same time he made conditions ideal for the first generation borers, and they're taking full advantage of the situation.



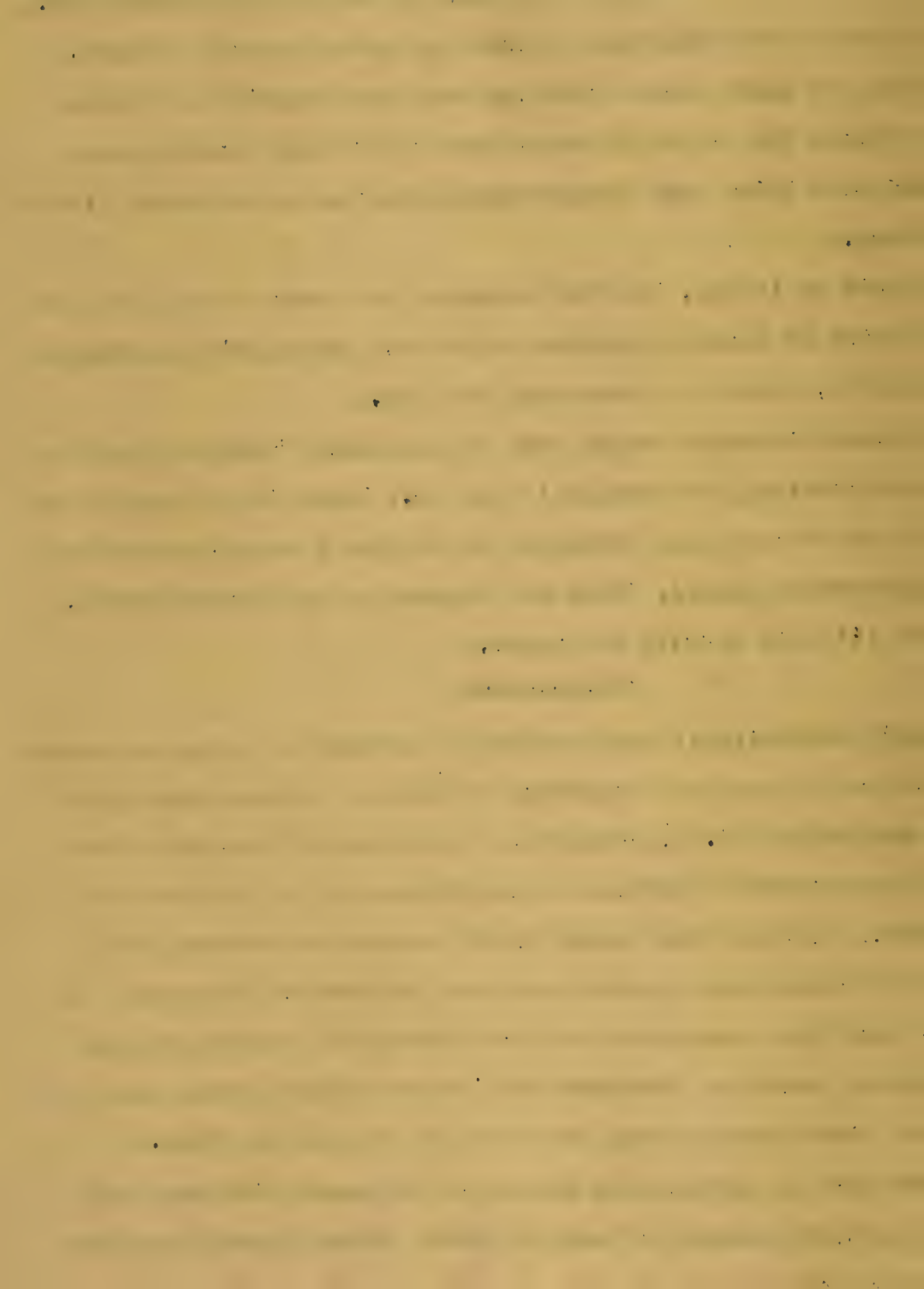
Another factor enters in, too. The same conditions that reduced early corn planting delayed the borer about a week in its development. Hence corn planted the third week in May is pretty heavily infested, too. Besides, we must realize that the very fact there's so little early corn forced the adults to concentrate on it and probably made many of them hold their eggs longer than normal until the later planted corn came along.

Be that as it may, the fact remains that early corn in all of eastern Illinois is heavily infested right now, and there's nothing we can do to cure it, short of destroying the corn.

The same rainmaker really went to extremes. When he forced a delay in corn planting, he carried it too far. Much of the corn is so late that it may be in ideal condition to receive a heavy infestation by second-generation borers. That all depends on the future weather. Look out, if it's wet in July and August.

(1:15) Our national food production program is facing a serious crisis right now in view of a scarcity of labor in detasseling hybrid seed corn, according to P. E. Johnston, supervisor of the Crops Corps program for the extension service of the University of Illinois College of Agriculture. It will take about 12,000 workers to detassel the 5,000 acres of commercial hybrid seed corn produced in Illinois. In view of the fact that almost half of this acreage is located in six central Illinois counties, Johnston says it means that workers must be imported from other areas within the state or outside the state.

Every acre of hybrid corn we fail to detassel this year will mean a loss of 3,200 bushels of corn in 1944. Since hybrid corn produces an average of ten bushels an acre more than open-pollinated, such a loss would mean some 30,000,000 bushels less corn to feed to



Illinois livestock in 1944. Furthermore, Illinois is just one of the many states producing hybrid seed corn.

Some of the 98 commercial seed corn producers who recently made a house-to-house canvass found only one-third to one-half as many workers as needed. This means that we must depend on outside help to carry out the job, a job not too strenuous for women and girls.

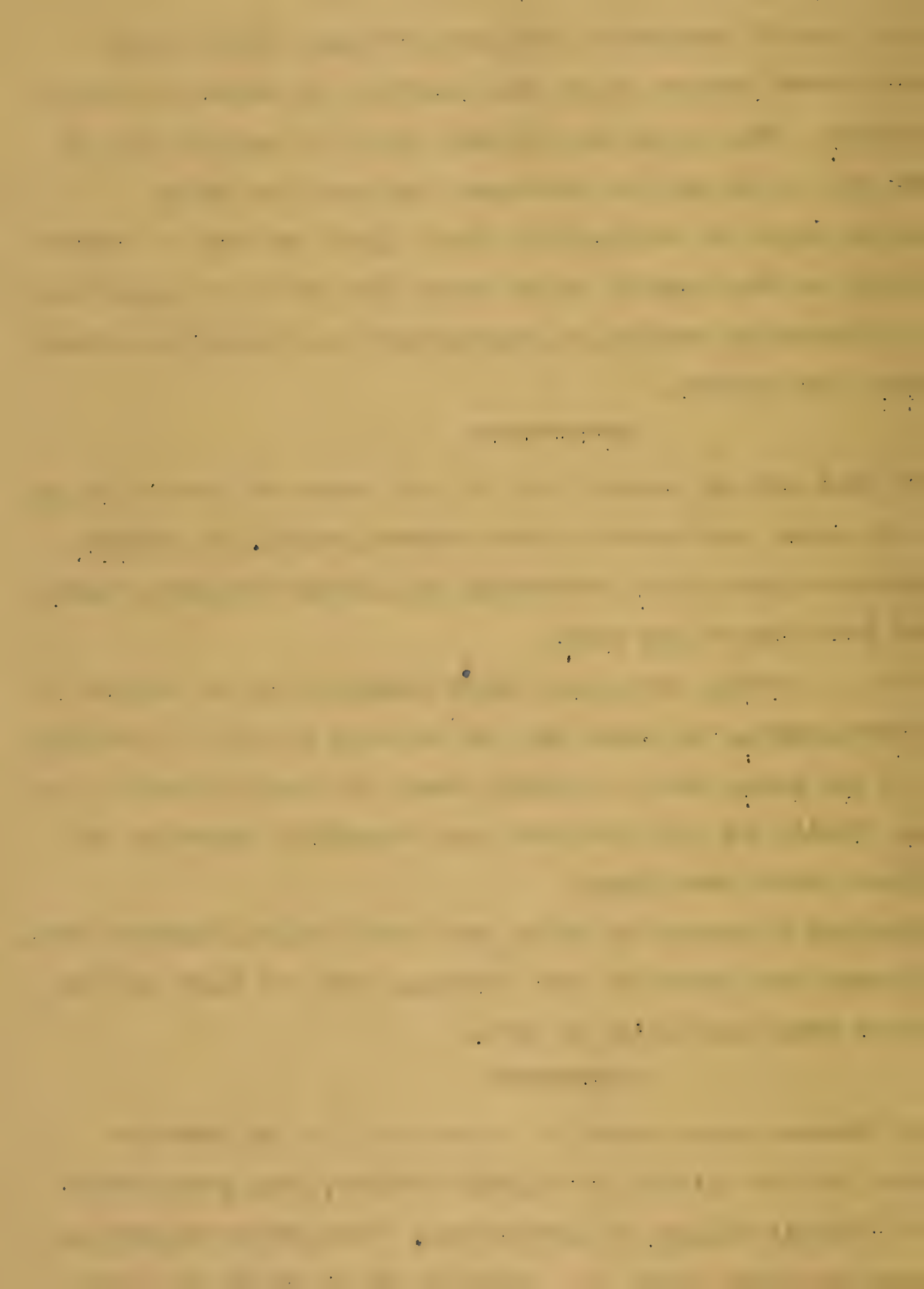
Johnston urges all women, high school girls and boys to contact the farm adviser in their county to see where they can be of assistance in this corn detasseling program, a program that means much in national food production for victory.

(1:30) Roll out the barrel, fill it with water and take it along to the field to water your horses in hot weather, says E. T. Robbins, livestock extension specialist, University of Illinois College of Agriculture. And don't forget the salt.

You see, a working horse must sweat profusely in hot weather to keep cool. Furthermore, the sweat must be replaced if he's to continue work. Now, as you know, sweat is mainly water, but there's quite a bit of salt, too. That's why salt and water are especially important to the working horse about every hour.

Overheating of horses and mules just won't happen, Robbins says, if they're allowed free access to salt morning, noon and night and are given some water every hour while at work.

(1:15) Kawvale wheat should be a real help in the food-for-victory program, in the opinion of Benjamin Koehler, crop pathologist, University of Illinois College of Agriculture. This wheat variety has been under test for eight years at a number of locations in the state



y the Experiment Station and has been found to have the best all-around core for resistance to important diseases, resistance to lodging and resistance to winter-killing. These attributes remove much of the hazard in carrying the crop through to a successful finish. Last but not least, Kawvale wheat has also given the best average yield during this period of eight years.

It won't make a good pastry flour, but makes good bread flour. Its big fault lies in the fact that its looks are deceiving. It looks, and therefore grades, like a soft wheat, but it mills like a hard wheat. Kawvale should, therefore, not be grown in southern Illinois where wheat is sold primarily to local mills for pastry flour. For the rest of the state where hard wheats are more generally grown, Kawvale is a good one.

Koehler urges Illinois farmers who grow this variety to save all of it for seed for their neighborhood instead of sending most of it to market. The number of scattered farms in this state that grow it are limited. Remember it's a variety that will help boost wheat yields in 1944 as far as seed sources can be found. It's spelled K-a-w-v-a-l-e.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

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FIFTY-FOURTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture)

Speaking time: 6:50 minutes

July 8, 1943

(FOR BROADCAST USE ONLY)

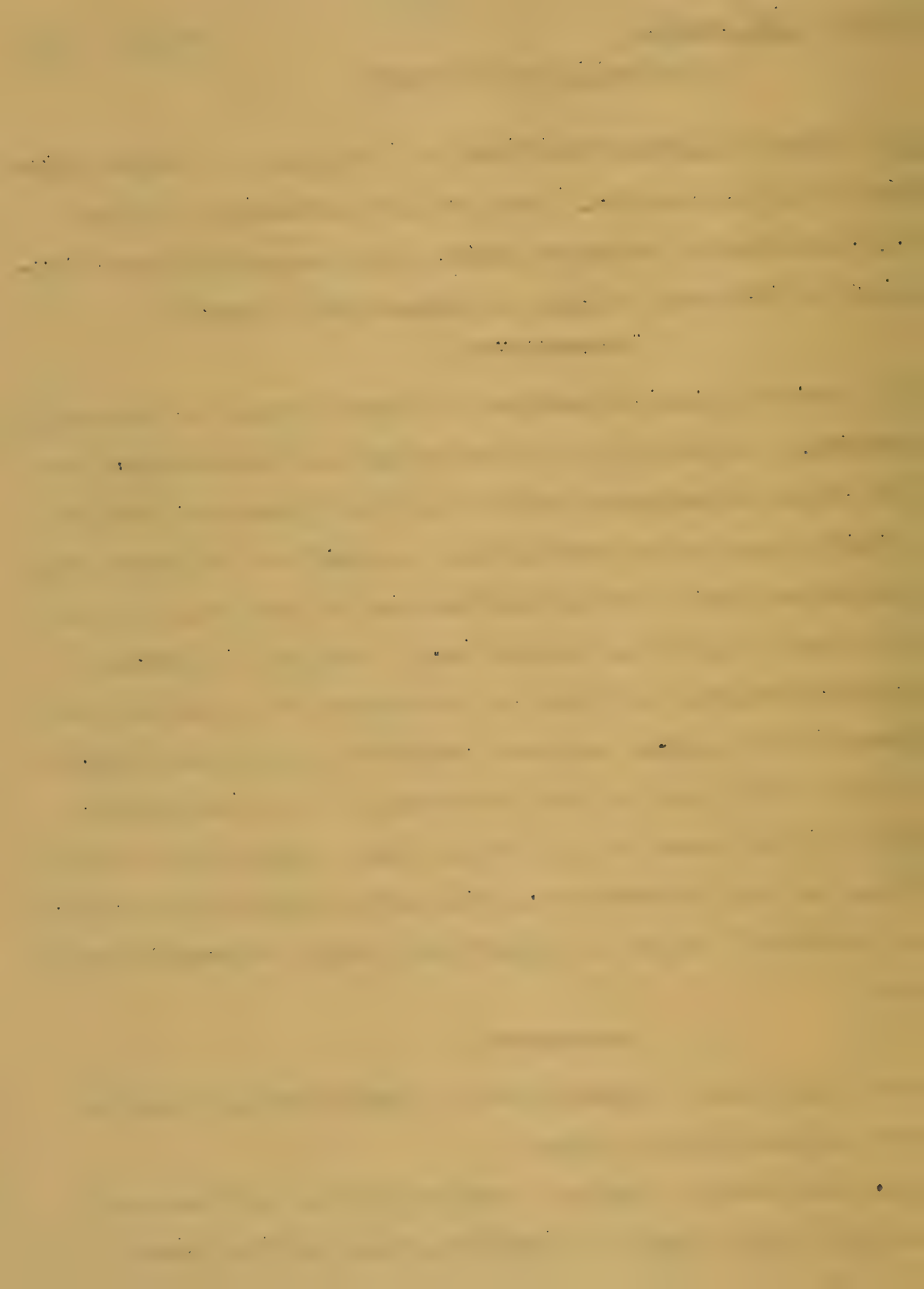
(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(:30) Here's a word of caution to victory gardeners concerning the corn earworm. As soon as the silks on the ears have wilted, inject about 20 drops of medicinal mineral oil just below the level of the shuck. You'll need to be careful that you don't do it before the silks have wilted or you'll prevent pollination of the ear. You can use an eye dropper to apply the mineral oil. Just keep in mind, 20 drops of medicinal mineral oil right in the center of the silks just below the level of the shuck. And wait until the silks have wilted. Of course, if you don't want to take the trouble to use mineral oil, cut the silks off just above the tip of the ear. Collect these silks as you cut them and then destroy them. But it's either cut the silks, use 20 drops of mineral oil or be content with corn earworms in your roasting ears.

(1:00) A note now on summer garden tricks that will help to get the summer victory garden started.

If you have trouble with your soil drying out and forming a crust, so the tiny plants can't get through, then try this method.

Work up the soil into a fine seedbed. Make the furrow in which you will plant the seed about an inch deep and an inch wide. A



short piece of board will help you make the furrow. If there isn't enough moisture in the bottom of the furrow to germinate the seed, then run a small stream of water in the bottom of the furrow until it is soaked up from end to end. Next plant your seed. Then cover the seed with something that will not crust. Sand is good, sifted cinders are, too. Or sifted leaf mold or well-rotted compost mixed with a little soil and sand will let the little plants push through quickly.

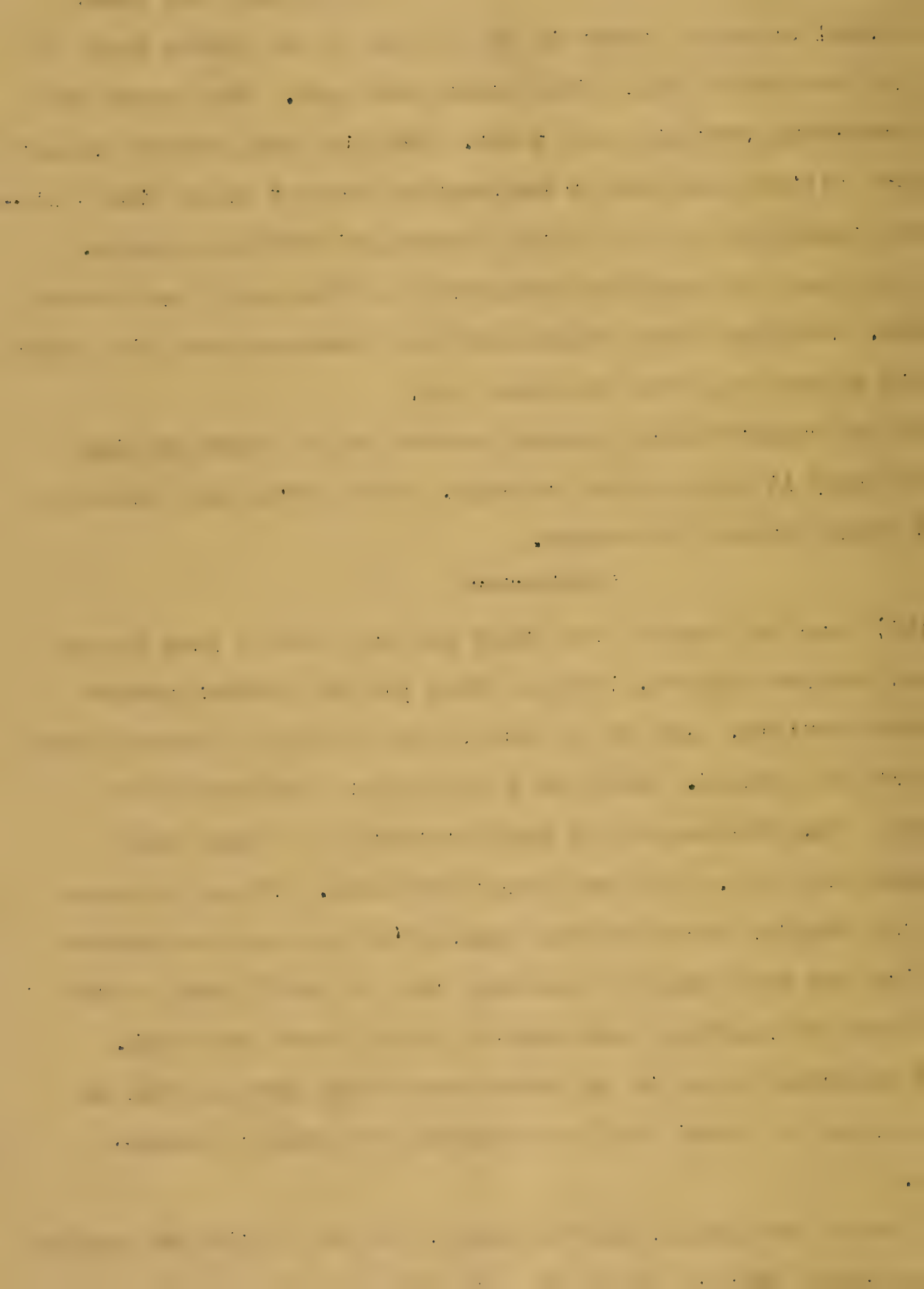
If you want to hurry the germination of the seed, lay a board over the row. But keep close watch under the board, and when the little plants begin to come up, take the board off.

Get the summer victory garden started and the warm growing weather will keep it coming along rapidly. Then you'll have plenty of vegetables right through the summer.

(:45) Here are some of the crops you can grow in your summer garden: New Zealand spinach, it will stand the hot weather better than any other variety. And by the way it has a snappy, peppery taste when eaten raw in a salad. Chard is a good green producer in hot weather, too. Snap beans--you can have succession of beans right through summer and fall. The same thing with corn. If you put some corn in at the regular corn-planting time, it's time now for another planting. You can keep right on planting corn so you'll have a succession of crops of roasting ears right up until frost this fall.

The important thing is to plant these crops just as soon as you have a piece of ground that has finished producing a spring-garden crop.

Two crops for greens, two for salad, and two of the old standby vegetables--yes, there's plenty to come from the summer garden--but the sooner they're planted now the better.



(:50) Here's one way the livestock farmer can help win the war. Get all your produce into actual use. More than half of our market livestock has bruises.

Bruises, of course, mean wasted feed, wasted labor and--of all things these days--wasted meat. Yes, sir, in a year's time in this country we waste 150 million pounds of meat by bruising. That is enough meat for an army of more than 400,000 men for a year.

That is a waste we can prevent. In fact, bruise prevention to save meat is now one of the main points in our wartime livestock conservation program.

Farmers can help prevent bruises by avoiding rough handling, or striking animals with canes, whips, clubs or pitchforks. Also avoid overcrowding of animals in chutes, trucks or cars. Avoid injuries to animals from bumping against gates, posts, doors or sharp corners. And in loading and unloading, make haste slowly.

By a little more care in the proper handling of our animals, we can get all we produce into actual use. Our country needs it.

(1:00) Here's a note on saving beeswax.

Bee specialists say the one big opportunity to get more beeswax is to save all the odd bits of wax that ordinarily go to waste. They urge all beekeepers to scrape all the burr combs from the frames when they are extracting the honey--in fact, scrape the wax from everything about the hive. But don't include bee glue with the wax.

And, pick up and save every scrapping, every bit of comb--no matter how small.

Some beekeepers now carry a container of some kind around with them when they're working with the bees to collect those odd bits of wax. The beekeepers are often surprised at how much wax they collect

in the course of a day. In fact, many beekeepers who have always been pretty careful about saving wax find they can save around an extra quarter to half a pound of wax from each hive. That's over and above what they collect through culling out poor combs and in other ways. This extra beeswax should add up to around a million pounds.

That million pounds will go a long way toward making up for the shortage of beeswax for supplies and equipment for our Army and Navy.

So, save every single scrap of beeswax and sell it to the dealer from whom you buy your beekeeping supplies and equipment.

(1:00) Make way for Prairie! It's a new variety of soft red winter wheat for Illinois, developed by O. T. Bonnett, assistant professor of plant genetics, University of Illinois College of Agriculture. The superior characteristics of this bearded, brown chaff, soft red winter wheat called Prairie are resistance to stem rust and wheat mosaic, winter hardiness, stiff straw and good quality.

On fertile soils not infected with wheat mosaic, Prairie yields as well as or better than standard varieties of soft red winter wheats. It's superior in yield to susceptible varieties. It's also adapted to fertile soils and responds well to soil treatment. Prairie will yield well in all sections of the state, either on soil infected with mosaic virus or on non-infected soil. However, since it's a soft wheat it would be best to grow it in areas where soft wheat predominates.

Of course, it will be three years or so until there'll be enough seed for it to be grown extensively throughout the state. In the meantime, remember Prairie, the new wheat that's susceptible to loose smut and leaf rust, but resistant to wheat mosaic, winter hardy, stiff strawed, good quality and high yielding.

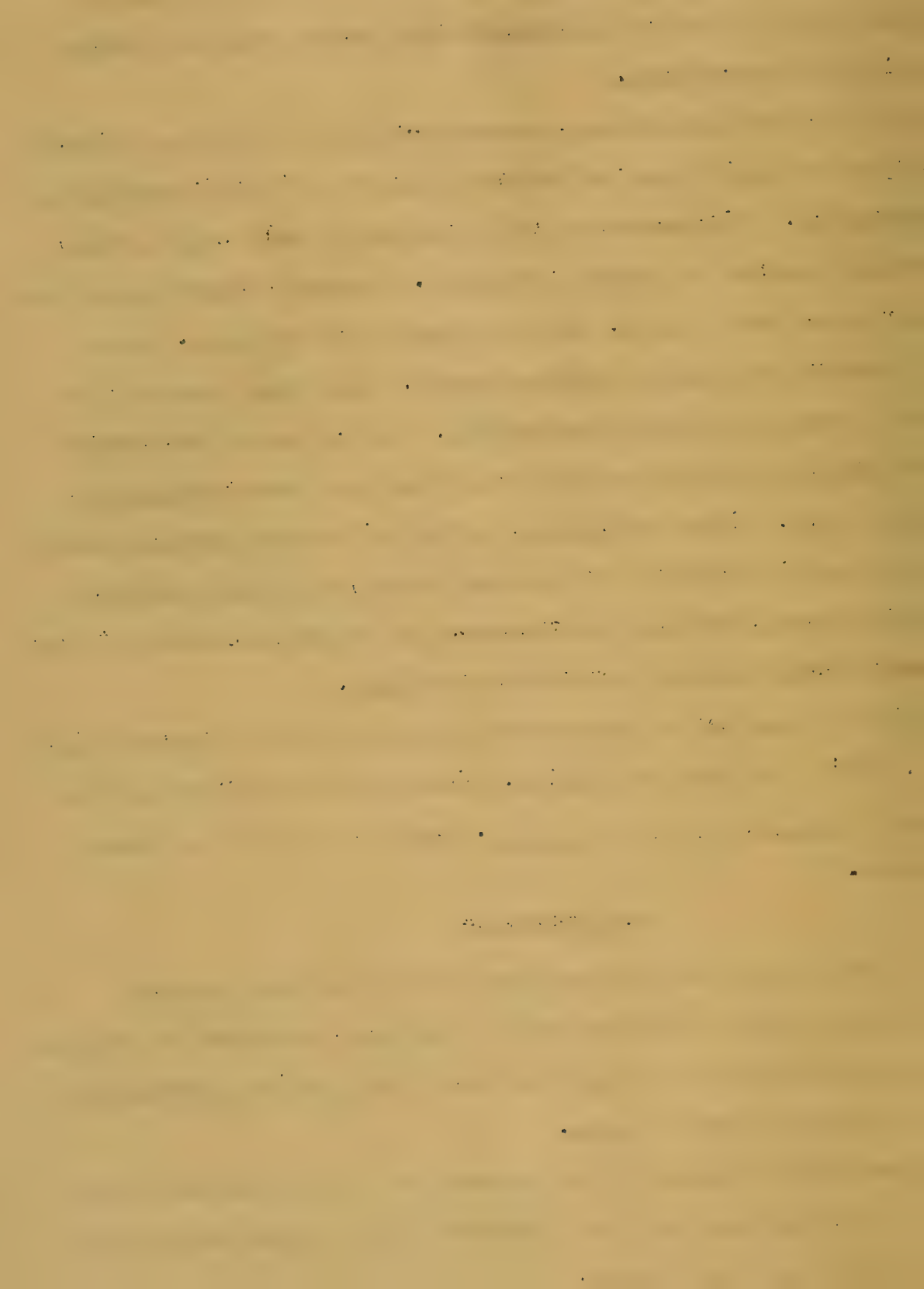
(1:00) Here's some information that may prove helpful in your fence-post problems. It comes to us from J. E. Davis, extension forester, who tells about an experiment that was carried out under Mississippi Delta conditions.

In a test for durability, creosote-treated posts were classed after four and one-half years as either "sound" or "partly decayed but still serviceable." Osage-orange (what you and I call hedge posts) was definitely superior to other varieties. However, black locust and red mulberry were fairly good. Second growth bald cypress, honey locust and overcup oak showed serious decay. Less than one-half to one-quarter of the posts were serviceable. Hill-grown black locust proved more durable than posts from trees that grew more rapidly in fertile Delta soil. There was, also, little difference between posts cut in summer and in winter. The treated posts, including loblolly pine, shortleaf pine, southern cottonwood and sweet gum, were not considered worth testing without creosote treatment.

We have a leaflet on fence-post treatment that you might like to receive. It's free for the asking. Just address your request to this station, _____, _____. Ask for leaflet on fence-post treatment.

(:45) More than two million hogs died of cholera in this country a year ago. But this loss can be stopped, according to veterinarians in the department of animal pathology and hygiene, University of Illinois College of Agriculture.

It should be stopped, for it represents a waste of enough meat for an army of one million men for a year--to say nothing of all the waste of good feed and farm labor.



A campaign against hog cholera is part of the new nation-wide, war-emergency livestock conservation program. The aim is to increase production through more effective disease control. To that end, farmers are urged to immunize against hog cholera, vaccinate pigs at about weaning age and to consult a veterinarian as soon as any sign of cholera shows up in the community.

For further information on how to cooperate in this hog health plan, consult your veterinarian and county farm adviser.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

FIFTY-FIFTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 5½ minutes

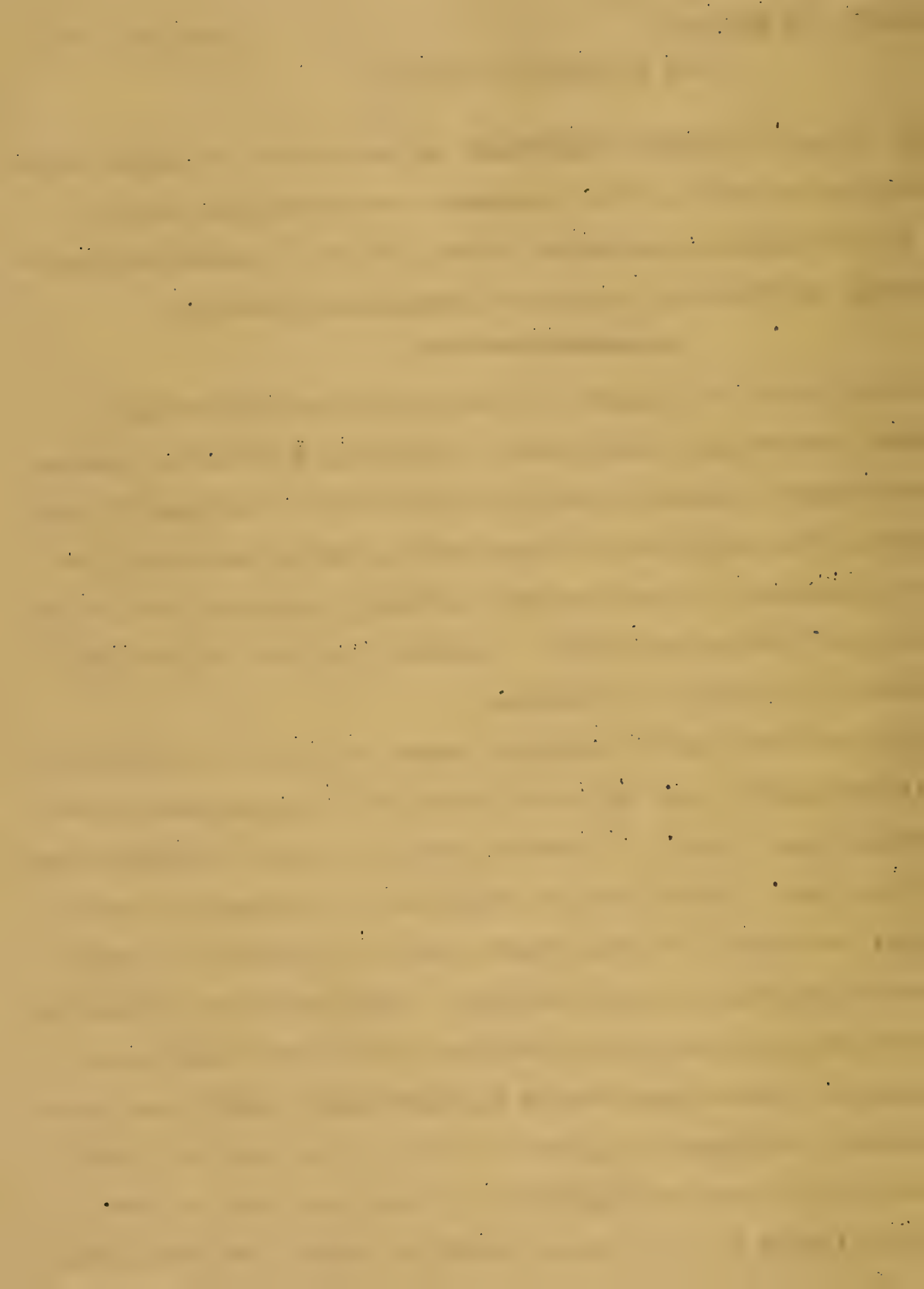
July 12, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:10) With the urgent need for legume hay and pasture, many Illinois farmers will seed alfalfa this fall, says C. M. Linsley, assistant professor of soils extension, University of Illinois College of Agriculture. The high price of seed and the dollar and cents importance of a successful stand that will provide plenty of cheap high-protein feed next year makes it more important than ever to eliminate as many chances of failure as possible.

Lack of fertility is the chief cause of failure in growing alfalfa, Linsley points out. It needs plenty of lime, phosphorus and potassium within easy reach. Of course, different soils need different amounts of limestone. Where three or four tons to the acre is needed to do the job, two tons won't do. That's why it's important to carry out a systematic practice of soil testing. Since lime works slowly in correcting acidity, it should be applied six months or a year before alfalfa is seeded. Where limestone is applied only a short time before alfalfa is seeded, drilling 400 pounds of lime to the acre will carry the alfalfa until the regular application of lime has time to work. Hills on which alfalfa is to be grown should be tested for phosphorus, too. It can be applied where needed at the rate of 1,000 pounds of rock phosphate to the acre or 400 pounds of superphosphate.

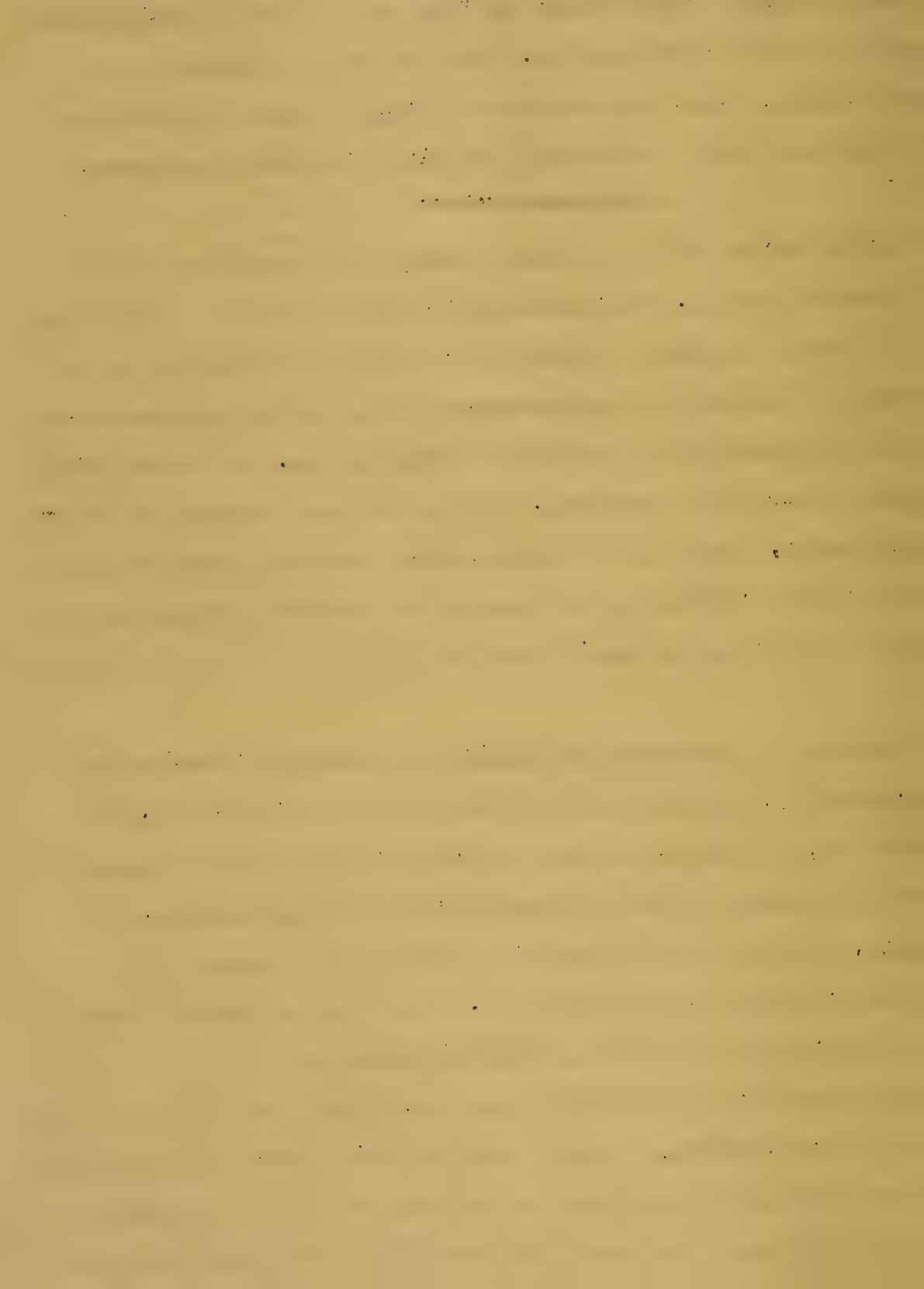


Farmers can have their soils tested for acidity and phosphorus by their county farm adviser or they can follow the directions as outlined in circulars 346 and 421. Both of these circulars are free for the asking. Just address your request to this station for circulars 3-4-6 and 4-2-1 on testing for limestone and phosphorus.

(1:30) We've been receiving a number of questions on the control of Canada thistle. Now according to weed experts at the University of Illinois College of Agriculture, the best method to use on Canada thistle is cutting or mowing----when they are in pastures---or cultivation as frequently as possible in other areas. In other words, keep them cut off or keep them down. Where you have patches of thistles in small areas, they can be treated with chemicals, such as sodium chlorate. We have a leaflet on the control of Canada thistle that we would be glad to send you if you'll drop us a card. It's free for the asking.

A number of questions are coming in concerning Reed canary grass. Incidentally, we also have a free leaflet on that, too. If you have some low, wet land---which you would like to seed to something---then Reed canary grass will probably serve the purpose. It makes good hay, although the pasture is a little bit coarse. It yields upwards of three tons to the acre. Reed canary grass is usually seeded in the spring and on a well-prepared seedbed.

Right now we're receiving a good many questions, too, on the control of the corn earworm. That's the one which ruins our roasting ears. And, although we've mentioned it before, remember to apply 20 drops of mineral oil into the center of the silks just below the level of the shuck. Do this as soon as the silks have thoroughly wilted. You can use a medicine dropper to apply the oil. By the way, just use

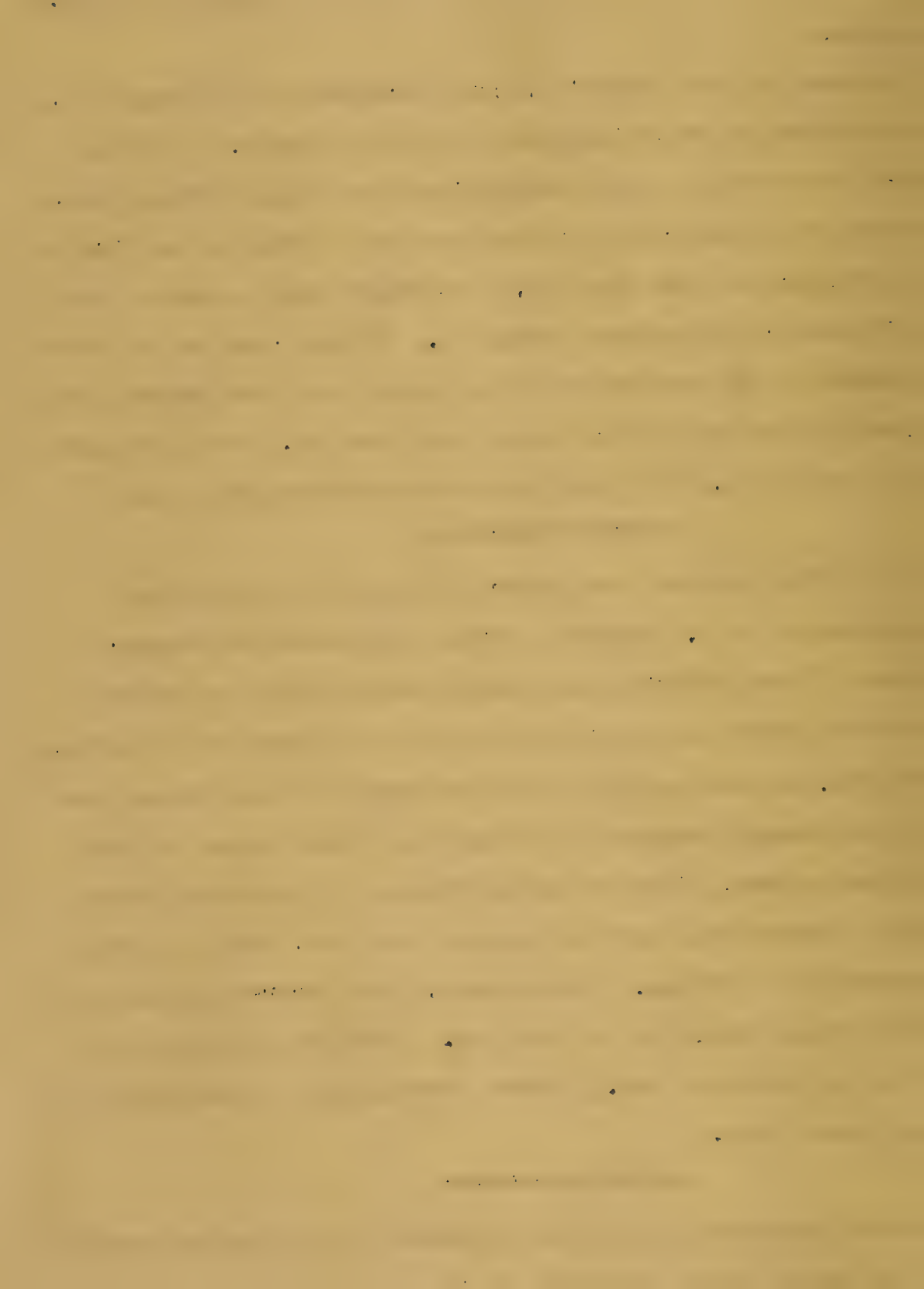


plain mineral oil---the one we use for medicinal purposes. If you don't care to use the oil, then clip the silks after they've wilted. That works, too.

Speaking of the control of corn earworm in roasting ears, we've been noticing a lot of European corn borer damage. You can walk along a field of sweet corn and notice the tassels broken over. That means some of us didn't get those corn borer eggs at the time we broadcast a caution to pick them off. You might take a look at the next crop of sweet corn you have coming on. If you find any of those white egg masses on the underside of the leaves near the midrib, and sometimes even on the top of the leaf, pick them off. When the corn borer gets in the stalk, it's too late to do anything about it.

(1:30) The European corn borer has invaded Illinois oat fields, according to C. C. Compton, of the Illinois State Natural History Survey. This situation is general through the east central part of the state where 10 to 100 per cent of the stems are infested. Compton says this is the result of the fact that corn was either too late or not far enough advanced to attract the first brood, so they laid their eggs on oats. Such an infestation will naturally affect fields. While farmers will have to accept this loss, they can still salvage infested oats for hay. Furthermore, late borer-infested oats that are still green should be cut for hay. This hay will have no ill effects as a livestock feed. Borers from infested straw will not migrate to adjacent corn.

(1:45) Thousands of Illinois citizens are now being troubled with fleas. A few of these citizens can take everything the fleas have to offer in the way of a bite, but the majority can not, and here



is what B. G. Berger, assistant entomologist of the State Natural History Survey, says is necessary to do in order to get rid of fleas and their resulting bites.

If you live on a farm, the first step in flea control is a thorough cleaning out of all manure from the barns and sheds. This manure should be scattered thinly over the available fields at some distance from the barns and sheds. If this is impossible, the manure should be stacked as far from the barns and house as possible.

The second step in flea control is to sprinkle or spray lightly over the floors of the barns and sheds a mixture of one part creosote and three parts fuel oil.

A light layer, one-eighth of an inch in depth, of crude naphthalene scattered over the floor is also effective in flea control, or a one-eighth inch layer of common salt watered into the floor will kill all stages of the flea.

Dusting pets every two weeks will help keep the fleas under control.

Many cases of potential flea outbreaks do not occur because from early spring to late fall all pets are dusted with a flea powder containing one-half of one per cent rotenone. Such dusting should be done at intervals of a week or two.

City dwellers bothered with fleas may get prompt relief if hydrocyanic acid gas fumigation is used. This gas should be handled only by an experienced person--never by a layman--because it is a very deadly poison.

When hydrocyanic acid gas is not used, relief may be obtained by closing up infested rooms and spraying them heavily with a good household fly spray. Pets dusted with flea powder throughout the warm months of the year are seldom troubled with fleas.

For additional information on flea control, write to this station for NH series mimeographed sheet No. 92, "Flea Control on Farms," or NH series mimeographed leaflet No. 178, "Fleas in the Home."

(:35) Strawberry plants set this past spring in victory gardens should not be allowed to spread all over the patch, says V. W. Kelley, extension horticulturist, University of Illinois College of Agriculture. Confine them to a matted row 18 to 20 inches wide. This can be accomplished by placing runners in definite locations as they are being cultivated. Strawberries are shallow rooted. Therefore, you'll want to hoe them like any other garden crop to keep down weeds and keep the soil in good condition for growth. As the plants are being hoed, the runners can be established in definite locations in the row by covering runners with dirt just behind the tip. This will hold it in place until new runner plants form a root system.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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FIFTY-SIXTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture

Speaking time: 5:55 minutes

July 15, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Today's ILLINOIS FARM FLASH is presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:15) Here is another wartime salvage job of collecting beeswax for war needs.

About one out of every five beekeepers lets wax go to waste.

Even the four who do save the wax lose a good deal of it that sticks to frames, hives and the odd bits of comb that get scattered around the hives.

Quite a bit of beeswax is also lying around farms that have gone out of the beekeeping business. Some of this may have been damaged by larvae of wax moths, but the balance should be salvaged.

Bee specialists figure that by saving all this wax now going to waste, we could boost our beeswax production in this country by about half.

All beekeepers -- big and little -- are urged to save every scrap of wax and sell it to the dealers from whom they get their beekeeping supplies and equipment.

The small beekeepers who do not have rendering outfits might pool their old combs and scrap wax to send to their dealers. Often it pays even the larger beekeepers to ship unmelted combs and scrap wax to a commercial concern. It has steam pressure equipment that recovers more of the wax than the home outfits.

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Send in even the slumgum and other leftovers. The commercial concerns can still recover considerable wax from them.

With beeswax bringing 41 1/2 cents a pound cash and 43 1/2 cents in trade, it pays beekeepers to salvage wax and sell it to wax dealers or to dealers in beekeeping equipment. Far more important, this wax is badly needed in making supplies and equipment for the Army and Navy.

(:45) "To take flies for granted is a serious mistake -- they can be controlled," says A. E. Ritcher, of the Illinois State Natural History Survey Division. To support his statement is the record of the cooperative fly control program in effect during the past seven years on the University of Illinois farms and campus.

The main objective of this fly control program is the prevention of fly breeding on or near University property. This is being accomplished through cooperation on the part of faculty members and employees of the various departments involved, to insure regular cleaning of all the barns and stables, followed by prompt disposal of the manure by spreading or scientific piling. These barns and other areas are inspected regularly for evidence of fly breeding.

The number of adult flies in the barns is reduced by screening and the regular use of fly sprays. Large fly traps are used to determine the adult population each week at several areas on the University campus and farms.

We have a free leaflet which will help solve your fly control problems. If you'd like a copy, just address your request to this Station.

(1:00) Light liming may be the means of establishing much needed alfalfa seeding now, says L. B. Miller, agronomist, University of Illinois College of Agriculture. By light liming we mean drilling 300 to 500 pounds an acre of ordinary agricultural limestone with the alfalfa at planting time instead of broadcasting 10 or 12 times that much six months to a year in advance of the seeding.

There is no magic about light liming. It's just a temporary method of sweetening a narrow strip of acid soil. It must be renewed for later legume seedings and is seldom used to advantage where limestone can be had when wanted and in large enough amounts. But it's the thing for the fellow who plans to seed alfalfa now and didn't lime six months or a year ago.

The grain drill with a fertilizer attachment is the ideal tool to use. If no fertilizer attachment is available, it's possible to drill dry agricultural limestone of medium grinding from the hopper of an ordinary grain drill. If your drill has no grass seed attachment, the limestone may first be drilled shallow and the alfalfa seed broadcast over the drillgrooves so that as much contact as possible will be made with the limestone.

We have a free leaflet on light liming which we'd be happy to send you. Just address your request to _____, _____.

(1:30) Illinois farm families are making greater use of electrical equipment to save labor and produce food, according to L. W. Lehmann, head of the agricultural engineering department, University of Illinois College of Agriculture. For the first four months of 1943 the state's REA-financed rural electric systems used ^{more} 12/kilowatt-hours of electricity each month than for the same period a year

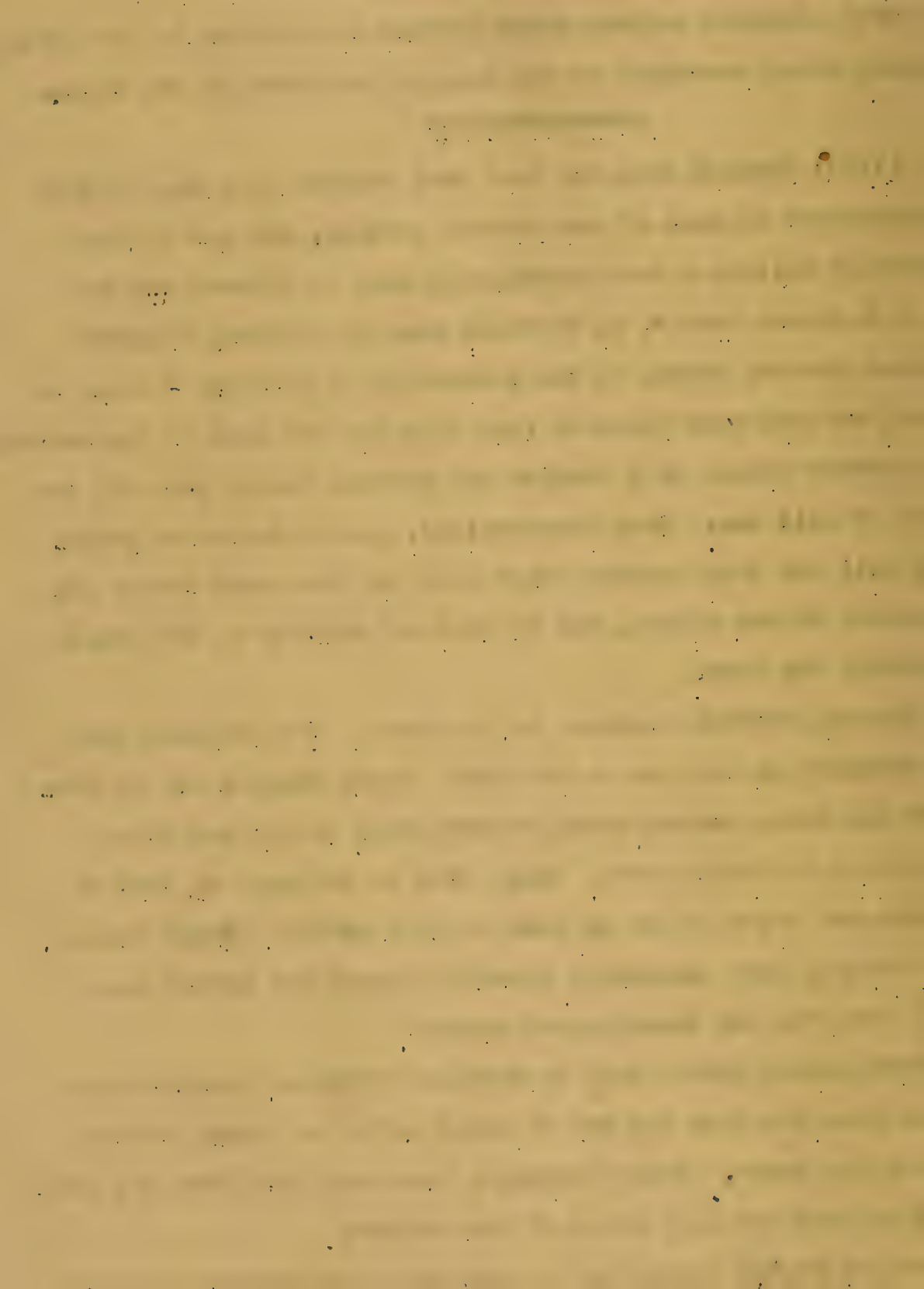
ago. Twelve kilowatt-hours is enough electricity to milk six cows for a month. This is based on a report from the 27 Illinois REA-financed rural electric systems which furnish electricity to more than 40,000 farms, about one-third of the electrified farms in the state.

(1:10) Judging from the fact that rabbits have done mighty well by themselves in some of our victory gardens, why not go into the business of raising a few domesticated ones to bolster our meat supply? In a report from R. E. Yeatter, game specialist, Illinois State Natural History Survey to the University of Illinois College of Agriculture, we find that three or four does and one buck of the medium weight or heavier breeds will furnish the average family with all the rabbit meat it will use. This fine-grained, pearly white and nutritious meat will not only release other meat for the armed forces and for exportation to our Allies, but it will add variety to the family diet throughout the year.

Raising rabbits requires little space. You can keep them in a city backyard as well as on the farm. Their hutches can be constructed of old scrap lumber, used poultry wire, crates and other similar material at little cost. Their diet is the same as that of their cousins who tried to eat up your victory garden. Whole grains, hay, table scraps, lawn clippings, palatable weeds and garden waste make a good diet for the domesticated rabbit.

Furthermore rabbit meat is quickly produced. Only 90 days are required from the time the doe is mated until the young rabbits are ready for the table. That represents something like four and one-half pounds of feed for each pound of live weight.

Now if you're interested in raising a few domesticated rabbits, we'll be glad to send you further information to help you.



Just drop us a card here at _____. A leaflet will be sent free on request.

Many gardeners just now are wondering what is causing the lower leaves of their tomato plants to roll up and twist, and, more specifically, what to do about it. The trouble may be state-wide in distribution, although most of the letters received on the subject so far come from central and northern Illinois.

The rolling starts with the lower leaves and may progress gradually upward until the leaves near the top are affected. These rolled leaves may twist and turn until they are completely inverted or upside down. Occasionally the lower surfaces of rolled leaves become brown and glazed. Affected leaves are apt to be thicker and crisper than normal and may die in some instances.

Leaf roll of tomatoes is not infectious, that is, not transmitted from one plant to another. Pruned or staked tomatoes are more severely affected than those not pruned.

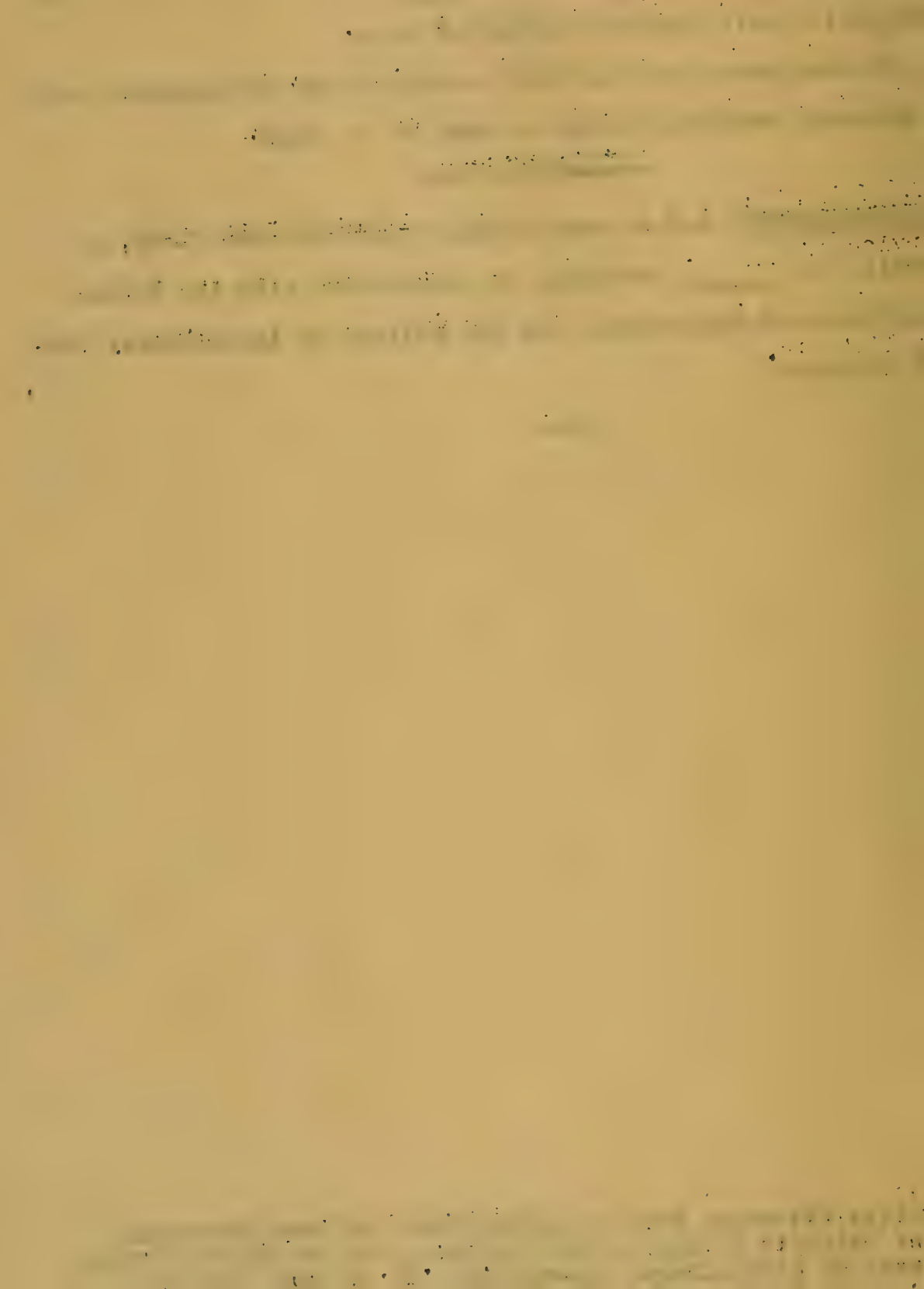
There are several practices or conditions that may bring about rolling of tomato leaves. For example deep cultivation near the plant or hoeing too close to the plant. Pruning outdoor, staked tomatoes seems to cause an excessive amount of leaf roll. In other instances it is possible that too much soil moisture, resulting in rotting of the roots, may bring about the malady.

There is no known control for leaf roll once it appears, says . B. Linn, extension horticulturist, University of Illinois College of Agriculture. Obviously, any practice which is likely to result in cutting or disturbing the roots should be avoided. Although pruning could appear to be essential in the growing of staked tomatoes, it

might be necessary for some gardeners to discontinue staking and pruning their tomato plants if leaf roll should cause a severe reduction in yield in their gardens year after year.

In some cases the leaf-roll condition may be temporary with complete recovery occurring within a week or ten days.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.



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FIFTY-SEVENTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois,
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 7:20 minutes

July 19, 1943

(FOR BROADCAST USE ONLY)

ANNOUNCER: Today's ILLINOIS FARM FLASH is presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:15) Lamb raisers and feeders seem to be in a unique group, for they have met their country's orders in full, says W. G. Kammlade, professor of sheep husbandry, University of Illinois College of Agriculture. He says the production of shearlings for pelts has reached a point where a special program is no longer necessary. Doubt the restrictions on the use of shearling pelts for civilians will soon be removed, and if manufacturing facilities are available, such items as sheepskin coats will again be on the market.

The fulfilling of shearling requirements for military use will likely result in a reduction in values of pelts and in the prices for sheep and lambs that are not in full fleece.

Those lamb raisers and feeders who wish to shear lambs will, however, have an assured market for the wool through the government's wool purchase program during the remainder of this year. There will be some confusion as a result of the great reduction in shearling demand, but lamb feeders and raisers certainly know they didn't produce "too little and too late," and no one has yet accused a lamb of intentionally yielding a substandard product.

Kammlade points out that the labor situation with respect to sheep shearers has improved considerably. There are some flocks

ot shorn, but shearers are available to do the work. If anyone in Illinois wishes to obtain men to shear lambs at this time of year, he may do so. While summer shearing may result in some slight improvement in rate of gain, it is not nearly so important an item in sheep management as maintaining the health of the flock, providing good pastures and fresh water and avoiding parasites.

(1:15) We're receiving a good many questions right now concerning the growing of buckwheat. In the opinion of agronomists at the University of Illinois College of Agriculture, buckwheat is something many southern Illinois farmers in flooded areas can look to for a little more feed in 1943. You know, it can be planted as late as August 1 and still make a crop. There are two main varieties of buckwheat, the Japanese and the Silverhill. Most people grow a mixture of the two. The crop yields an average of 15 to 18 bushels an acre. If you have difficulty in locating seed, contact this station. Incidentally, buckwheat makes excellent bee pasture.

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At this time of year, many farmers are looking for various grasses and legumes which will provide them with a better pasture program. A good many inquiries are coming in concerning the use of bromegrass. You'll recall we mentioned bromegrass not so long ago in connection with the new circular on bromegrass and bromegrass mixtures. It's Bulletin 4-9-6 and is free for the asking. If you're among those who are interested in bromegrass, we suggest that you write for your free copy of bulletin 4-9-6.

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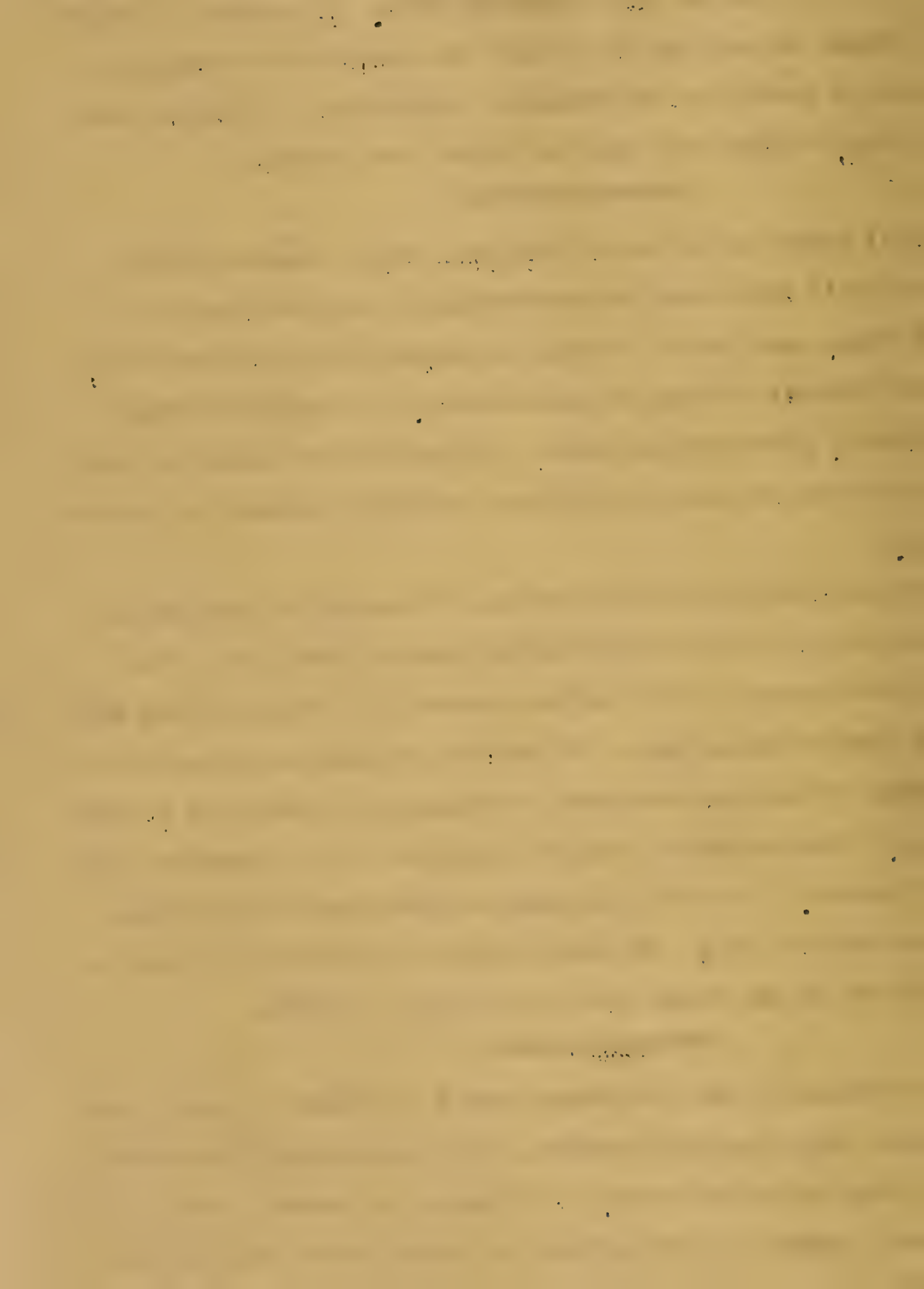
One of the serious weeds most often sent into the University of Illinois College of Agriculture for identification is quack grass.

That's especially true at this time of the year. You'll find it in your victory gardens and in farm fields as well. It spreads by underground root stems as well as by seeds. It should not be allowed to go to seed and is controlled by frequent cultivation. In small areas it should be dug, making sure that all roots are removed.

(:45) Brown rot is one of the many fruit diseases which can't be seen until infection has occurred, and once started it's difficult to stop, says Dwight Powell, associate in plant pathology, University of Illinois College of Agriculture. It damages mostly peaches, apricots, plums and cherries. Apples are not severely damaged. Our only hope in controlling brown rot is to prevent infection from starting.

This isn't very difficult to do. A coating of sulphur on the fruit from now on until maturity will prevent brown rot. The secret is to start about a month before harvest and spray or dust with sulphur every five to seven days. If you're planning to spray, use a wettable sulphur or sulphur which has a wetting agent added so it will mix with water. This should be used at the rate of six pounds to each 100 gallons of water. If you're planning to dust, any form of fine dusting sulphur may be used. The main thing to remember is to keep a coating of sulphur on the fruit from now on until harvest.

(1:00) Much of the 1943 wheat crop in Illinois is badly infected with scab, says Benjamin Koehler, crop pathologist, University of Illinois College of Agriculture. This means, of course, we're going to need to take a number of precautions in seeding this wheat in the fall for a 1944 crop. Koehler outlines a three-point program which will eliminate much of the hazard in seeding scab-infected wheat.



First, avoid seeding wheat after corn, if possible. Wheat after corn is damaged twice as badly by scab as wheat after some other crop. Second, fan the seed hard to remove the lightweight bleached dead grains. Treat the seed with Ceresan to kill the spores on the remainder of the seed and to prevent seedling blight. Treating the seed usually accounts for about 10 per cent better stands and better winter survival. Third, use seed wheat that seems to have more resistance to scab. Kawvale is suggested except in the soft wheat belt of southern Illinois. Brill is recommended for central Illinois where lodging is ordinarily not troublesome. Fulcaster, Nabob and Wabash are good soft wheats for the southern part of the state except on soil where wheat is likely to lodge.

If we keep these three points in mind in seeding wheat this fall, our chances for a crop in 1944 will be considerably strengthened.

(1:15) This is the time of year when "sleeping sickness" begins to cause the heaviest losses in horses and mules. A year ago it attacked at least 5,000.

Animal disease specialists of the department of animal pathology and hygiene, University of Illinois College of Agriculture and USDA explain that horses and mules with "sleeping sickness" have a sleepy look about them, a fever, they grind their teeth, have trouble chewing and swallowing and walk with a wobbly gait. Most of the affected animals also appear stupid, but a few get excitable.

Horses and mules that get a bad attack are likely either to die or to be more or less disabled for many weeks.

Animal disease specialists of the University of Illinois College of Agriculture say that "sleeping sickness" is most likely to attack horses and mules out on pasture much of the time, or animals

otherwise exposed to mosquitoes and other flying, biting insects. Animals are less likely to get the disease if they are in the stable a large part of the time, or if they have fly nets over them while working in the field.

But the most reliable way to protect work stock against this disease is to have them vaccinated by an experienced veterinarian. Only one out of three thousand animals vaccinated by veterinarians come down with "sleeping sickness." One dose of vaccine protects the animals fairly well for a short time. Two doses seven to 10 days apart should protect them throughout the season.

Incidentally, there are two types of "sleeping sickness," the eastern and western types. It is important to use the eastern vaccine against the eastern type of "sleeping sickness" and the western vaccine against the western type.

(1:00) With our imports of beeswax limited by the war and with a short crop of honey last year, we have to save every pound of wax we produce here at home to meet our Army and Navy needs for beeswax.

Bee specialists say we probably lose more beeswax from damage by the wax moth than from any other one cause.

When bee colonies are strong, the bees themselves keep the wax moth under control. The big loss of wax comes after the beekeeper takes the combs out of the hives and stores them.

To prevent loss of wax, bee specialists recommend stacking up supers of combs as tightly as possible after extracting the honey. Then after sealing all cracks between supers with gummed paper, fumigate with para-di-chloro-ben-zene, commonly called PDB, or some other fumigant. Incidentally, PDB is the same material we use to control ordinary clothes moths.

At the same time, the Government of the United States has been very anxious to see that the interests of the people are protected, and that the public lands are properly managed. It has been the policy of the Government to sell the public lands at a low price, and to allow the people to purchase them in small parcels. This policy has been very successful, and has resulted in the sale of millions of acres of land to the people. The Government has also been very anxious to see that the public lands are properly managed, and that they are not sold at a low price. It has been the policy of the Government to sell the public lands at a low price, and to allow the people to purchase them in small parcels. This policy has been very successful, and has resulted in the sale of millions of acres of land to the people. The Government has also been very anxious to see that the public lands are properly managed, and that they are not sold at a low price.

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After you've fumigated the combs and frames, inspect them every two or three weeks during the summer, because the fumigation does not destroy the eggs. If you see fresh signs of the wax moth, fumigate again.

If you have wax around you won't use, sell it before the wax moth gets a chance at it.

We need to protect combs from the moth -- and to save every single scrap of comb and wax -- to provide beeswax used in making shells, planes and other war materials.

To fumigate with carbon disulphide, set a container of the liquid on top of a stack of hive bodies or supers and place an empty super with cover above. Use one tablespoonful of carbon disulphide for each 10-frame body. Fumigate outside away from fires and avoid sparks of all kinds, since carbon disulphide is explosive.

(:50) Here is a special farm bulletin from J. C. Hackleman, professor of crops extension, University of Illinois College of Agriculture.

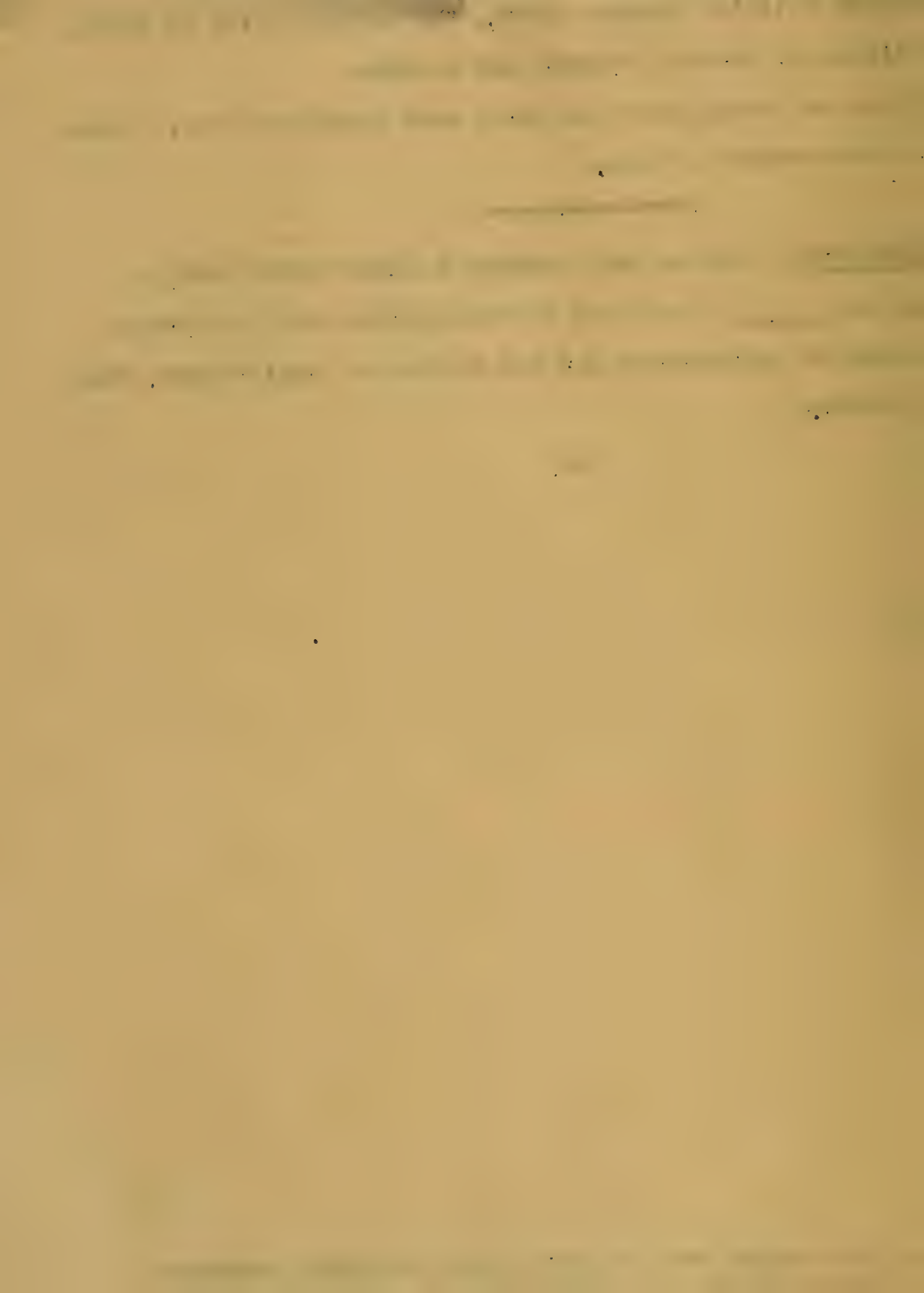
In connection with the announced intention of the War Food Administration to ask farmers to increase their wheat acreage, Illinois has a particularly serious problem because farmers couldn't seed thousands of acres of bottomland to a summer crop. Wheat will likely be the crop seeded on large acreages of this overflow area. In other words, we've got a problem on wheat-seed supplies.

Farm advisers have been asked to make a survey of the potential seed supply in each county and arrange a list of farmers who have retained the wheat produced this year as a possible supply of seed. Naturally the interest lies in the purer and better lots of seed.

There is particular interest in varieties of soft wheat, such as Fulcaster, Fulhio, Trumbull, Wabash and Thorne. As for local varieties adapted a little farther north, the interest lies in Brill, Wisconsin Pedigree 2, Iobred, Tenmarq and Kawvale.

If you are among those who have seed wheat for sale, please contact your farm adviser at once.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.



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FIFTY-EIGHTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture in cooperation with
(U. S. Department of Agriculture

Speaking time: 4½ minutes

July 22, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:00) After their mid-summer survey of crop prospects, agricultural economists say farmers generally are doing their best. This is no mere friendly pat on the back. It is the careful estimate of the experts, based on the acreage in crops farmers now seem likely to harvest.

In spite of floods, the late spring, and the disturbing readjustments of wartime, farmers have more land in our chief field crops than they had last year. Except in cotton, they may even harvest more acres than at any time before the Big Drought. They have more land in corn, and more land in the 7 "war crops." More in soybeans and peanuts. A third more land in flaxseed, and nearly a third more in beans and sweet potatoes. Nearly a fourth more in potatoes, and almost half again as many acres in dry peas.

Because of increases in acreage over last year, the economists expect larger crops of dry beans, peas, peanuts, rice, potatoes and sugar cane, and near-record crops of hay, soybeans, and barley. All in all they expect generally good yields on the largest acreage in 11 years.

Of course, a lot depends on weather between now and harvest, and on getting the labor to bring in the harvest. And even on the

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larger acreage, the economists don't expect the total production to come up to last year's phenomenal showing. But they do think production is likely to turn out well above either the long-time average or the average of recent years.

(1:00) Fattening hogs as has been done for the past two years is out for the duration, according to Sleeter Bull, professor of meats, University of Illinois College of Agriculture. The better Illinois swine growers are going to "streamline" their hogs for victory and market them at lighter weights. Not only will they save some corn, but they'll market a crop of hogs with more lean and less fat.

It takes a lot more corn to produce a 245-pound hog than a 200-pound hog, Bull points out. Furthermore, the last 45 pounds put on the hog takes a lot more corn than the next to the last 45 pounds. In fact, it takes four bushels or more of corn to increase the weight of a hog from 200 to 245 pounds. Figuring a saving of four bushels of corn on 95 million hogs gives a total saving of nearly 400 million bushels of corn, or four-fifths of the estimated corn shortage.

The larger hog crop marketed this year at 200 pounds would yield about seven per cent more lean and about 12 per cent less fat than the smaller crop of a year ago slaughtered at 245 pounds.

The corn shortage problem may be solved to quite an extent by marketing the remainder of this year's hog crop and next year's hog crop at 200 pounds. This will not reduce the amount of animal fats seriously, but will actually increase the amount of lean meat over a year ago.

(1:15) Let's glance for a moment at what better Illinois dairymen are doing to increase production of dairy products to meet wartime goals.

MEMORANDUM

The first of the two main points of the report is the fact that the Commission has been unable to obtain the necessary information from the various sources to which it has been directed to go. The second point is the fact that the Commission has been unable to obtain the necessary information from the various sources to which it has been directed to go.

The Commission has been unable to obtain the necessary information from the various sources to which it has been directed to go. The Commission has been unable to obtain the necessary information from the various sources to which it has been directed to go.

RECOMMENDATIONS

The Commission recommends that the necessary information be obtained from the various sources to which it has been directed to go.

First, they're maintaining summer production at higher levels by feeding grain to cows on pasture. Jerseys and Guernseys receive three to eight pounds daily and others three to nine. They're pasturing available legumes, supplementing permanent pasture with Sudan grass, mowing weeds in permanent pastures twice a year, practicing rotation grazing and are planning a fall seeding of winter barley or rye for late fall and early spring pasture.

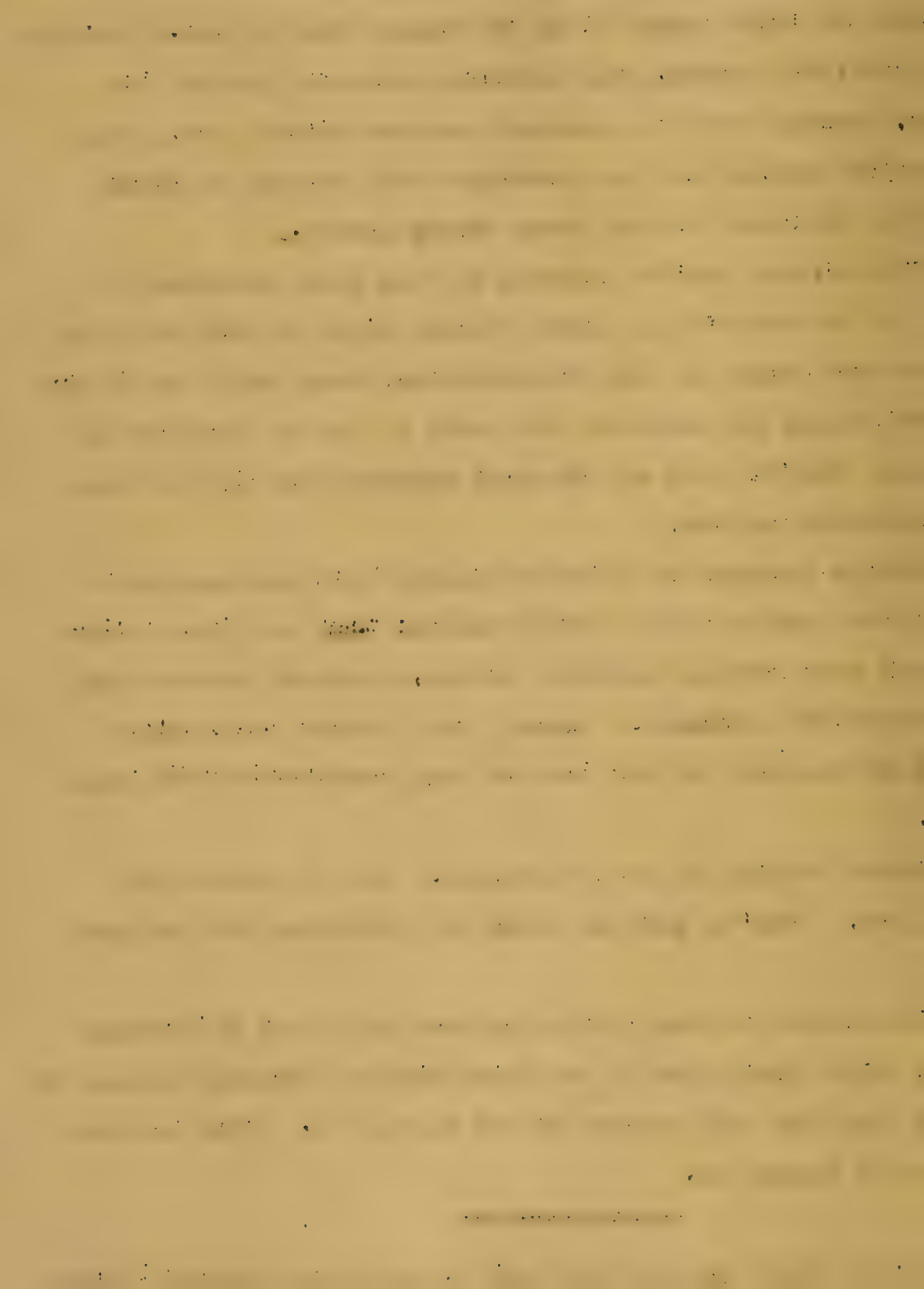
This winter they're planning to feed grain according to production at the rate of one pound of grain daily to each three and one-half to four pounds of milk for Holsteins, Brown Swiss and Short-horns. For Jerseys and Guernseys the ratio is two and one-half to three pounds. They'll feed all the good roughage cows will eat and carefully balanced rations.

Better dairymen in Illinois believe that good management pays. Cows are bred to calve every 12 months; they are given a six-to eight-week rest between lactation periods; darkened quarters and plenty of shade are provided in summer; and plenty of salt, water and bedding is supplied so that they are kept comfortable both summer and winter.

Normal culling is not interrupted. Beef is needed and prices are good. They're anxious to use all available feed for good cows only.

In addition to what better dairymen are doing to increase production, dairy specialists of the University of Illinois College of Agriculture urge that all dairymen do not waste feed. Grow and feed an abundance of legume hay.

(1:00) Twenty production credit associations serving Illinois farmers made some 7,000 loans totaling more than 15 million dollars



during the first six months of 1943. This was reported to the University of Illinois College of Agriculture by Ray E. Miller, secretary, Production Credit Corporation of St. Louis. The amount loaned to Illinois farmers represents an increase of nine and one-half per cent in the volume of loans made over the corresponding period of 1942. There was a decline, however, in the number of loans made. This decline, Mr. Miller states, was largely attributed to the fact that many of the stockholder members of the associations throughout this state have accumulated sufficient operating capital from profits during the past two or three years to make it no longer necessary to use their PCA as a source of short-term credit.

The Monmouth Association made loans totaling almost two million dollars which put that organization in first place among Illinois associations. Mr. Otto Steffey is president and John Kruidenier is secretary. The Mississippi Valley Association led all others in Illinois from the standpoint of gain in business. Its increase in the number of loans closed for the six-months period was twelve and one-half per cent.

Miller adds that of June 30, 1943, more than 13,000 Illinois farmers owned voting stock to the extent of more than \$1,200,000.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

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FIFTY-NINTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 5 minutes

July 26, 1943
UNIVERSITY OF ILLINOIS

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Today's ILLINOIS FARM FLASH is arranged as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:00) There's a new leaflet on alfalfa which has just been released by the University of Illinois College of Agriculture. It discusses the uses, requirements, varieties, seeding and harvesting practices of alfalfa as well as insects and diseases that attack the crop. It also stresses the points to be kept in mind when planting the crop. It can not be grown on sour soils. In fact a few soils can probably never grow it successfully. In southern Illinois adapted common alfalfas should be planted, while in the northern part of the state variegated alfalfas are recommended. Both do well in central Illinois. Seed grown in the extreme southwestern states or imported from any foreign country except Canada is not recommended for Illinois. Where alfalfa is to be grown for the first time, thorough inoculation must be assured. Certain insects and diseases sometimes damage an alfalfa crop, and protective measures against them may be needed. A first-class seedbed is essential. This leaflet, Illinois Circular number 560, is free for the asking by addressing your request to this station. You may call for it by name or number, "How to Get Good Alfalfa Yields," Circular 5-6-0.

(1:00) A number of inquiries are coming in to the department of animal pathology and hygiene, University of Illinois College of

Agriculture, concerning swine enteritis. You know, there have been many so-called cures for enteritis, but treatment is often ineffective. Sanitation and good management offer the most hopeful approach to the control of this serious disease.

Dr. Robert Graham, head of the department, urges swine growers to prevent enteritis by following the McLean county system of swine sanitation. Feed rations that are complete and balanced. Immunize pigs against hog cholera away from pastures and lots used for sows and fattening hogs, and avoid the purchase of infected swine. Experience has shown that feeder pigs are especially susceptible to enteritis. Therefore, all hogs newly purchased should be quarantined for three weeks before they are allowed to run with the rest of the herd.

Feeding oats that have been soaked in water to which an alkaline compound has been added is recommended as a treatment for enteritis. Various alkaline compounds are available and when properly used are helpful in the early stages of the disease. However, they should be given under the direction of a qualified veterinarian.

We have a free leaflet on enteritis that we would be glad to send you if you'll address your request to this station. That's spelled "e-n-t-e-r-i-t-i-s."

(1:00) Now for a brief review of some of the building regulations with D. G. Carter, professor of agricultural engineering, University of Illinois College of Agriculture.

September 7 of this^{year} begins a new farm building year, and it will be permissible to spend \$200 on dwellings and \$1,000 on essential agricultural buildings on farms without a permit. This is true regardless of the construction started previously.

Farm houses may be remodeled or new houses may be purchased to accommodate married tenants if the need can be shown. If the proposed expenditure exceeds \$200, a War Board permit is required.

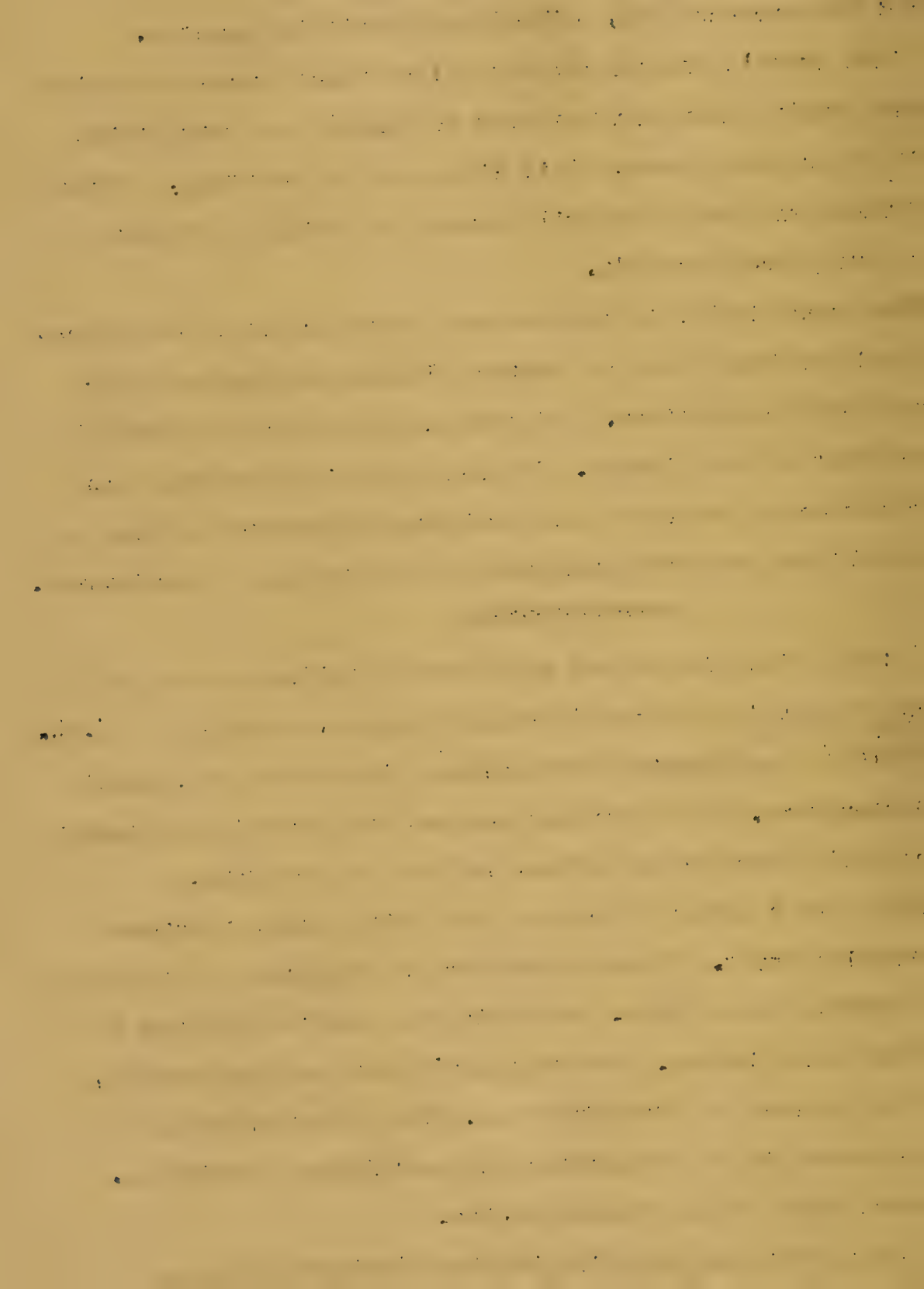
Then there's the new order on silos which became effective July 1. This permits silo manufacturers to make 60 per cent of the number built in previous years. This will ease the shortage, Carter says, and farmers who need silos will usually be able to get them if their orders are placed promptly.

Some more lumber is now available for farm use. An allocation of 500 million board feet of softwood lumber has been made exclusively for farm construction. Illinois has been allotted about 32 million board feet of this lumber. It will be assigned by counties and the farm rationing committee will authorize individual farmers to make purchases if the proposed construction is essential to production.

(:45) Illinois peaches will soon be rolling to market and probably many of them in last year's bushel baskets, according to V. W. Kelley, specialist of the extension/ department of horticulture, University of Illinois College of Agriculture. So if you buy peaches displayed in old baskets or containers you've never seen before, let's be considerate.

There are a number of reasons for this seemingly backward method of marketing fruit. Illinois growers use thousands of containers each year to package their fruit. And this year they're striving to produce more than ever before. But they won't have as many baskets, boxes and crates to ship the foodstuffs in. The supply situation of wood and metal needed in the manufacture of containers is critical. There's the labor angle to be considered, too.

Kelley points out that the War Food Administration has launched a container-saving program to encourage the conservation and reuse of fresh fruit and vegetable containers. So let's save those



blackberry boxes we picked in this past weekend, the bushel baskets, orange crates, vegetable hampers and all the rest. We can use them again.

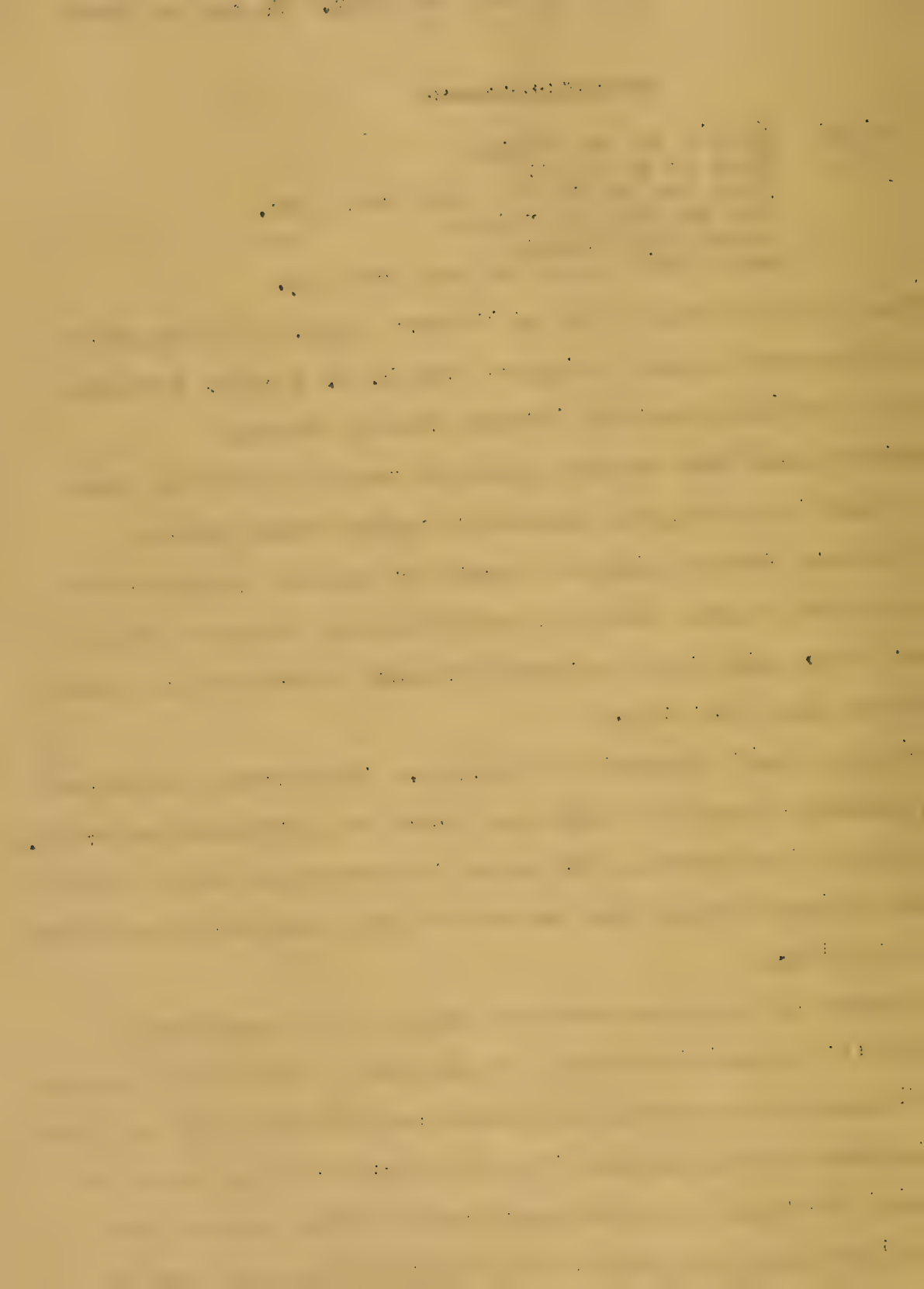
(1:15) Here's to the chigger
That is no bigger
Than the point of a very small pin.
But the bump he raises
Hurts like blazes
And that's where the rub comes in.

Now with this choice bit of "blank" verse, let's check on some simple precautions against chiggers with B. G. Berger, assistant entomologist of the Illinois State Natural History Survey.

Berger says that chiggers begin to show up about the time blackberries start to bloom, and thereafter anyone susceptible to chiggers had better practice simple precautions against chigger bites until the first hard frost. Besides feeding on man, chiggers feed on horses, mules, dogs, cats and sometimes seriously injure or kill young chickens, turkeys and wild birds.

Chiggers don't burrow into the skin. They attach themselves to the skin, usually close to a hair, and inject an irritating secretion. Of course, chiggers are scratched off after the first day or two and the application of cooling lotions such as mentholated ointment or carbolated petrolatum is soothing.

Chiggers are so widespread and develop on so many forms of animal life that it's almost impossible to control them over wide areas, Berger says. However, by removing underbrush and keeping weeds and grass cut, their abundance can be reduced. The application of one pound of sulphur for each 800 square feet of ground will further reduce their numbers, if applied early and three or four applications are made at two-week intervals.



We have a free leaflet on chiggers, if you'd like to have a copy. Just address your request to this station.

So here's to the chigger
That pulls his trigger
And shoots you under the skin.
Then when he gets under
It hurts like thunder
And that's where the rub comes in.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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SIXTIETH (From Extension Service in Agriculture
ILLINOIS FARM FLASH (and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 4:55 minutes

THE UNIVERSITY OF ILLINOIS
July 29, 1943
ANNOUNCEMENT
UNIVERSITY OF ILLINOIS

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:00) July is the most dangerous month of the year as far as farm accidents are concerned, according to E. W. Lehmann, head of the department of agricultural engineering, University of Illinois College of Agriculture. And he cites some figures compiled from reports of accidents received by the Illinois Agricultural Association in 1941--the latest available--to prove his point.

Of these particular accidents, 567 were reported in July as compared to 299 as a monthly average for the entire year. In other words, almost twice as many. Falls head the list with 127, tractors are second with 68 and horses third with 65.

The increased number of accidents in July is probably due to the fact that there are more different farming operations taking place at this time, such as haying, harvesting, threshing, corn plowing and the like, than any other month in the year.

About 80 to 85 per cent of the accidents, Lehmann says, occur simply because the person concerned doesn't know or is not aware of the right thing to do at the right time. That is, it's really the fault of the operator and not the equipment or the livestock concerned in the majority of cases.

With harvesting and haying in full swing, perhaps we can cut down on the number of accidents by keeping in mind that July is the

It is a pleasure to have you here, and I hope you will find the trip well worth the effort. The weather is just what we need, and the scenery is beautiful. I am sure you will enjoy it all.

MEMORANDUM

On the subject of the proposed trip to the mountains, I have been thinking a great deal. I am sure it will be a most interesting and profitable one. I am sure you will find the trip well worth the effort.

Very truly yours,

I am sure you will find the trip well worth the effort. I am sure you will find the trip well worth the effort. I am sure you will find the trip well worth the effort.

I am sure you will find the trip well worth the effort. I am sure you will find the trip well worth the effort. I am sure you will find the trip well worth the effort.

I am sure you will find the trip well worth the effort. I am sure you will find the trip well worth the effort. I am sure you will find the trip well worth the effort.

Yours truly,

month that takes a heavy toll on man power for war power. Let's always be careful.

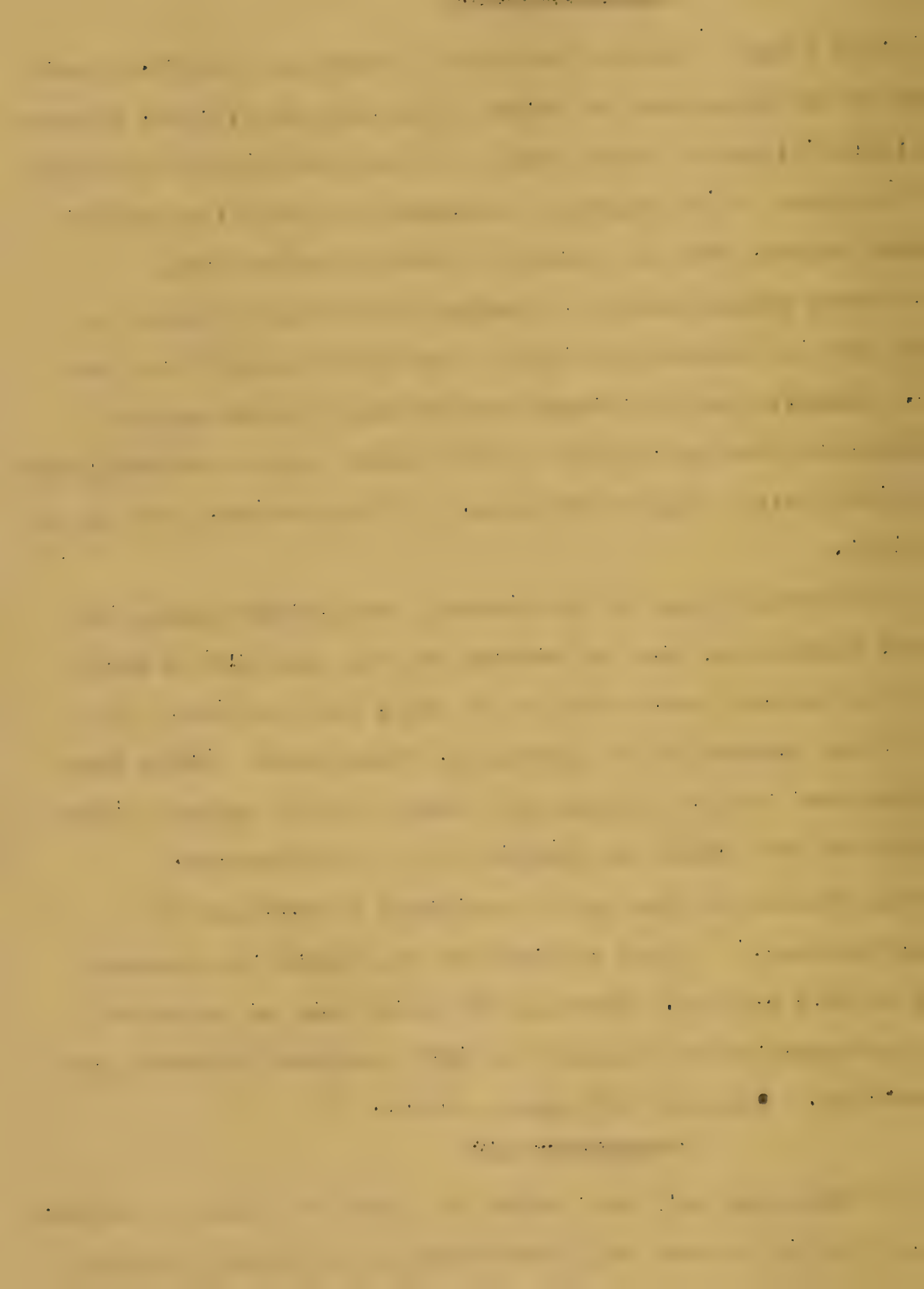
(1:00) I have a little item here I picked up from Dr. Robert Graham, head of the department of animal pathology and hygiene, University of Illinois College of Agriculture, on the prevention of pink eye in cattle. You know, it's generally considered an infectious disease and may spread rapidly from one animal to another in the herd.

Affected animals should be isolated from the remainder of the herd and kept in darkened quarters in the stable where flies can be kept out. Laxative and nutritious feed should be given and an ointment containing some antiseptic, such as boric acid or sulfanilamide should be applied twice daily to the eyes. Affected animals may go to pasture at night.

In the early stages of the disease, confinement during the day and simple medication, such as washing out the eyes with a weak salt solution or dusting boric acid in the eyes, will suffice. The exact cause of the disease is not known, Dr. Graham adds. While bacterins are sometimes used to prevent and treat affected animals, these remedies should be used under the direction of a veterinarian.

A description of pink eye is contained in circular 557, "Fight Animal Diseases." A copy is free for the asking by addressing your request to this station. Circular 557 would make an excellent addition to your agricultural library and it's something stockmen can't afford to overlook. Remember the number, 5-5-7.

(:45) There may only be a third of a crop of peaches in Illinois this year, but if growers will leave them on the trees a little longer there'll be bigger and better fruit. V. W. Kelley, extension



horticulturist, University of Illinois College of Agriculture, says that experiments show an increase of 24 per cent during the last seven days they're left on the trees. In terms of bushels, this would mean that a 40-acre orchard bearing a full crop would have an increased yield of about 400 bushels for each additional day the whole crop was left on the trees. That's a gain of a carload of peaches each day in a 40-acre orchard.

With peaches undoubtedly selling at a continued high price this year, growers can't afford to lose this increase in volume and bushels by picking too soon. Harvesting more mature ^{peaches} will pay big dividends in bushels and dollars. Kelley says that growers could do nothing which would increase the demand for Illinois peaches more than to put large quantities of riper fruit on the market.

(1:10) Here are the priority uses to which farmers' savings might be put, in the opinion of L. J. Norton, professor of agricultural economics, University of Illinois College of Agriculture: (1) increasing working capital in forms which expand the output of needed goods, in other words, more or better dairy cows to make more milk; (2) land improvements which will produce higher grain yields, such as spreading limestone and growing clover; (3) the reduction of debts to a safe level, and (4) the purchase of government bonds.

Norton believes the most problematical investment for farmers' savings is the purchase of land. As you know, land has increased in price and very likely will go higher. Of course, just what the price of land will be over the longer future depends on the long-time trend of prices. You know the old story of prices for farm products rising in war times and declining following wars. History is likely to repeat despite the fact that the federal government will avoid deflationary policies and attempt to support farm prices after the war.

It must be remembered that Illinois agriculture came out of World War I with a heavy debt burden and was in trouble afterwards for twenty years. Therefore, a repetition of speculative purchases of land with small down payments should be avoided at all costs, Norton cautions. We will be in a much better position to face postwar difficulties if we can avoid tying up too large a proportion of wartime earnings in small down payments on land.

(1:00) Here are the additional points recommended in the report of the special committee of the American Dairy Science Association on the feed situation as related to milk production, according to W. W. Yapp, professor of dairy cattle breeding, University of Illinois College of Agriculture. You'll remember that we gave you the eight points of the National Dairy Program not so long ago.

The first of these additional points pertains to raw rock phosphate, "colloidal" phosphate and insufficiently defluorinated phosphates which are being moved in considerable quantities into feed channels. Because of the danger to dairy cattle of an excessive intake of fluorine, products of this nature should not be used unless they are guaranteed to contain not more than one-tenth per cent of fluorine.

Point number two: Every effort should be made to keep the dairy cattle population within limits of the visible feed supply. Culling of inefficient producers should be continued.

Number three: Advantage should be taken of breeding facilities through artificial breeding and cooperative bull associations that reduce the number of bulls required. This saves feed and labor.

And the fourth additional point: Give calves a good early start on milk. Then change to a suitable calf meal or calf starter

to save whole milk. Start calves on grain and hay not later than two weeks of age.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

SIXTY-FIRST
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture

Speaking time: 3 minutes

August 2, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:30) With all the urgent wartime need for more meat and milk and other livestock products, some of the figures on livestock health losses take on a new meaning. They call attention to ways farmers can actually market more from the stock they raise.

For example, when corn is fed to wormy pigs, one ear out of every five is wasted. Yet veterinarians of the University of Illinois College of Agriculture and the U. S. Department of Agriculture say farmers can stop that waste by using the swine sanitation system of raising pigs.

More than half of all the livestock marketed have bruises, which mean wasted meat, not to mention the feed and labor that went into the production of that meat. Simply handling the animals more carefully in loading and shipping will help stop loss from bruises.

In sheep and lambs, nodular worms reduce feedlot gains as much as 10 per cent and damage the intestines so they're unfit for making surgical sutures. The remedy: Use phenothiazine to remove the worms.

Grubs in cattle, the department men estimate, cause the waste of enough leather to keep two million soldiers in shoes for a year. You can save much of that shoe-leather by the control of the grubs by the use of derris powder or other means.

Mastitis in dairy cows cuts milk production as much as 20 per cent. The loss can be stopped by a combination of preventive measures involving sanitation, proper milking sequence and veterinary service.

Cholera still kills more than two million hogs a year--wasting enough meat to supply an army of a million men for a year. Prevent that waste by vaccination.

All in all, farmers can add to our total livestock supplies a tremendous amount of meat and milk and hides and other livestock products by preventing livestock losses.

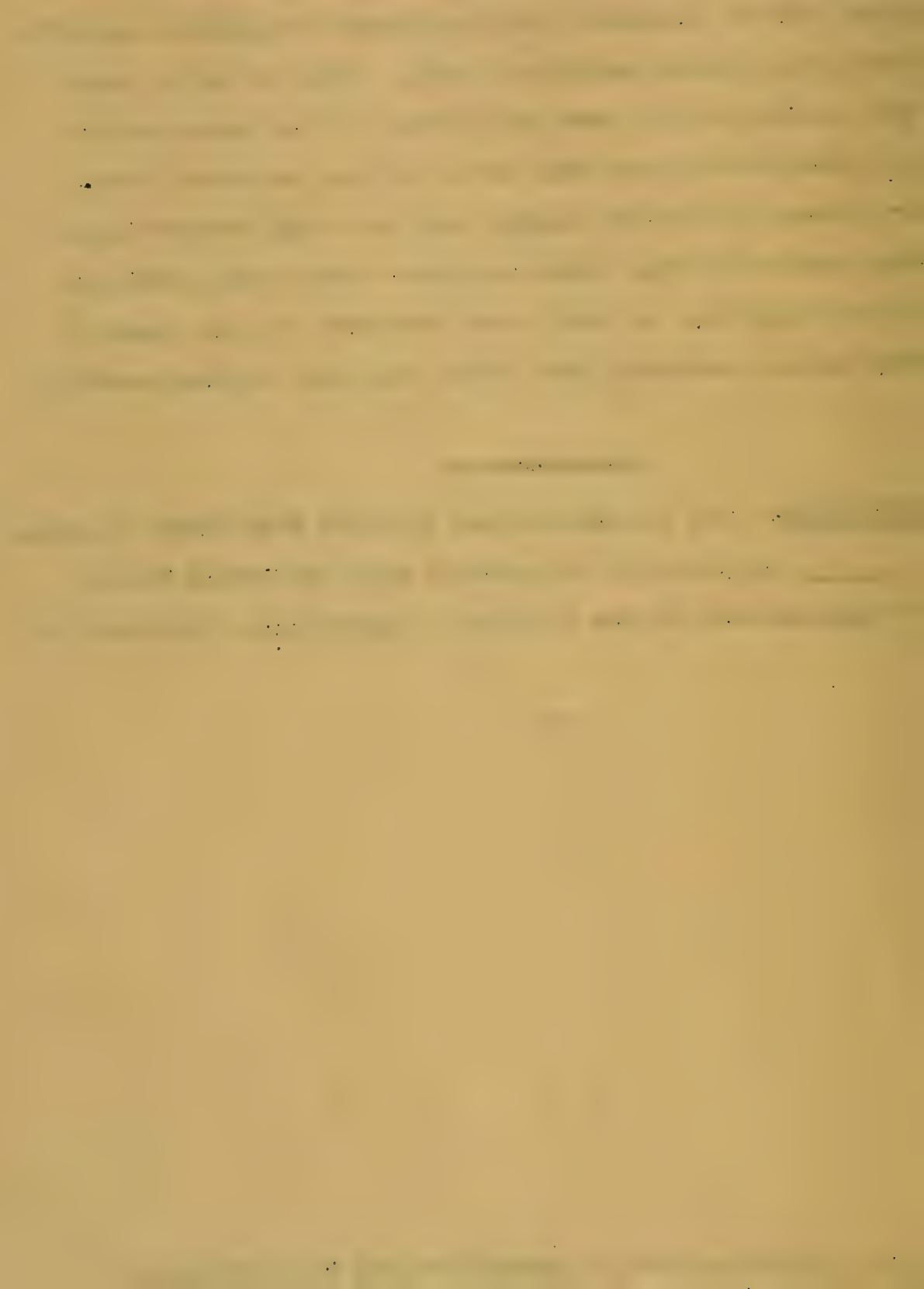
(1:00) Rye may be worth as much as \$35 or more an acre as an early spring pasture for dairy cattle, judging from the experience of practical dairymen, says C. S. Rhode, professor of dairy husbandry extension. Pasture demonstrations conducted on the dairy farm at the University of Illinois College of Agriculture also indicate the high value of rye in a pasture program. A combination of rye for late fall and early spring pasture and Sudan grass for summer produces more milk an acre than any pasture crop grown on the University's dairy farm. After the rye is pastured off in the spring, it is turned under and seeded to Sudan grass.

With a demand for increased dairy production during 1944, and faced with short supplies of hay and other feeds, Illinois dairymen are urged to seed small acreages to rye during August and early September. Usually, one acre for two to three cows is sufficient. Under normal conditions rye seeded in August at the rate of one and three-fourths to two bushels an acre will produce succulent fall pasture and an abundance of early spring feed. After two to four weeks pasturing in the spring, the rye may be plowed and Sudan grass seeded.

(:30) Now we'd like to give you the 1943 version of a man "dressed up fit to kill." He has a loose or ragged sleeve or trouser leg, a dangling belt or suspender and floppy worn out gloves, and he's always working around moving machinery parts. While it may be both patriotic and stylish to wear worn out clothes for the duration, it's safer to wear them other places than around moving machinery parts. Roll up your sleeves if they're ragged, tuck any loose trouser legs in your shoe tops and fasten that loose suspender with a nail until you can get a button sewed on. We can't save manpower for war power by working around moving machinery parts with loose and flopping wearing apparel.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Speaking time: 3:30 minutes

August 5, 1943

(FOR BROADCAST USE ONLY)

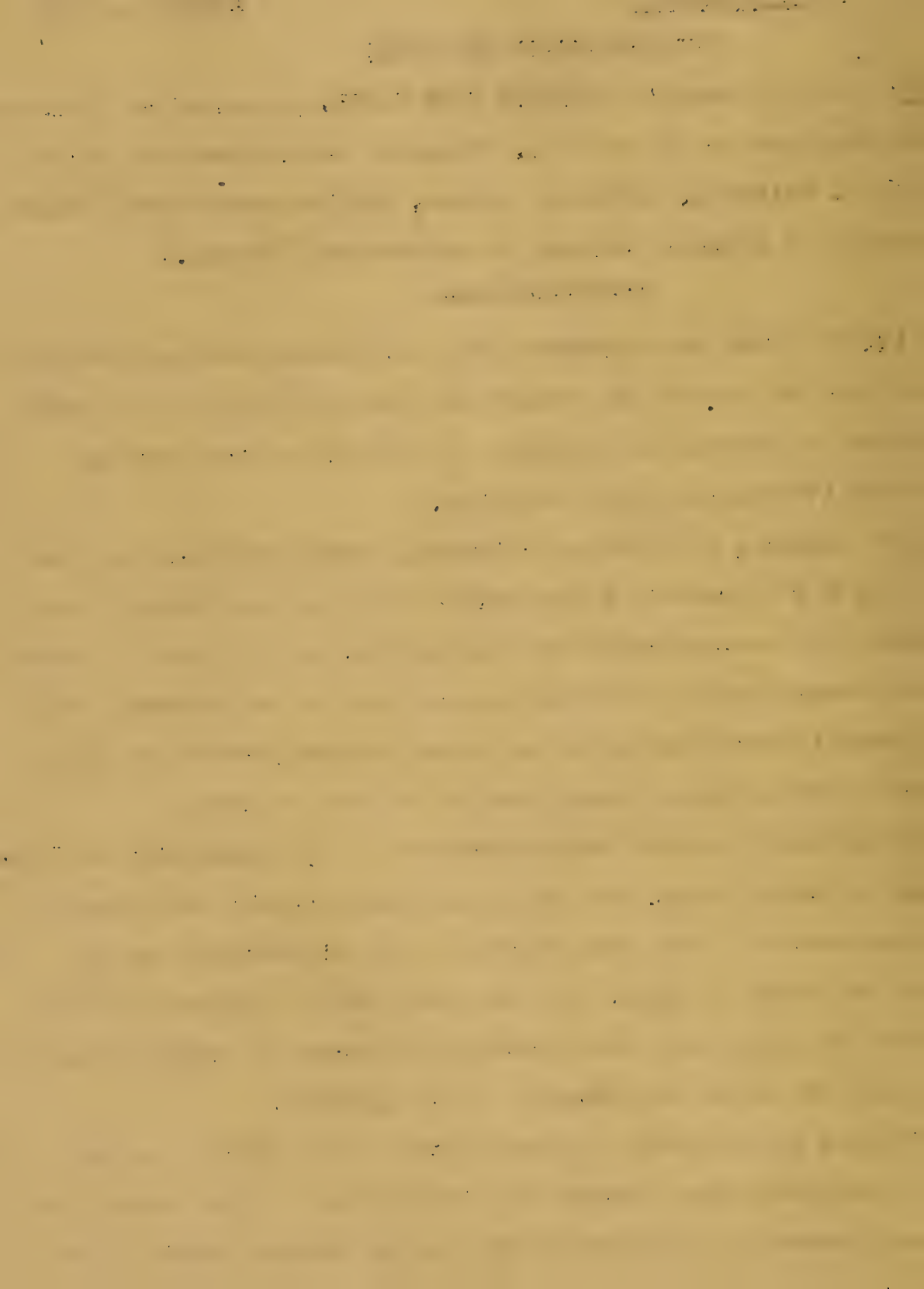
(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:30) With the midsummer rush on, farmers need all the help they can get on jobs around the farmstead. One good helper is a small electric motor, especially if you make it portable so that you can readily switch it from one job to another.

For example, at Palmyra, Illinois, Frank Andrew--one of the members of the M J M Electric Cooperative--uses the same motor to run many different units---including the lawn mower, sausage grinder, corn sheller, ice cream freezer and large exhaust fan in the kitchen. And while his portable motor turns the ice cream freezer, Andrew is free to take care of other chores which have to be done by hand.

According to agricultural engineers of the University of Illinois College of Agriculture, you can easily make portable any motor of one-half horsepower or less. All you have to do is mount it on two wooden rails or pieces of pipe. You can move motors equipped in this way from place to place and reset merely by placing the rails between two cleats near the piece of equipment to be operated.

Printed instructions for making your small electric motor portable are available free through the University. If you would like to have these instructions together with a chart showing pulley sizes and speeds at which different kinds of equipment should be run, write to the Department of Agricultural Engineering, University of Illinois, Urbana.



(1:15) Here's another call for beeswax.

War industries are using large amounts of beeswax. Thousands of pounds of beeswax are going into adhesive tape for soldiers and sailors and for sealing boxes of ammunition. The Army and Navy use considerable beeswax for dental work, too. War plants are using a great deal of wax to make models of new airplane motors and new tools and machinery. They also use hundreds of pounds of beeswax as a protective coating for expensive machinery and equipment being shipped into warm climates where ordinary grease would melt and run off. Those are just a few of the dozens of wartime uses for beeswax.

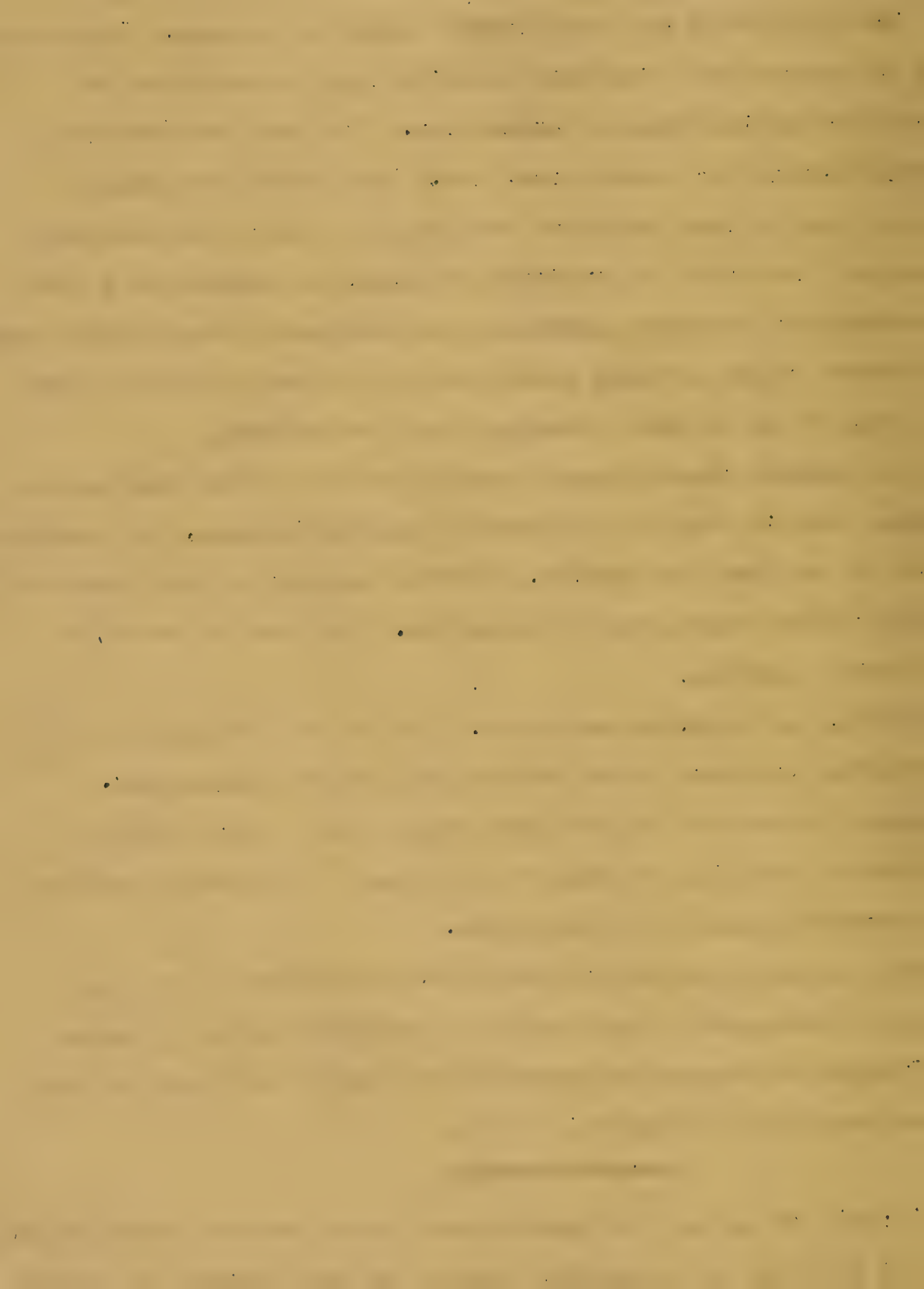
In ordinary times, church candles are one of the big markets for beeswax. But, in view of the wartime need for beeswax, the churches have agreed to use less for candles. Another big market for beeswax in peace time is in the manufacture of cosmetics. But now the cosmetic makers are using less wax.

Still, wax supplies are short. One reason is that this past year, the weather cut down honey and wax production considerably. Another reason is that our imports have dropped off. It's partly a matter of lack of shipping to bring in the wax. It's partly a matter of sharing world supplies with our Allies.

The one big opportunity for the United States to get more beeswax is for beekeepers to save wax that ordinarily goes to waste.

Dealers in beekeepers' supplies will pay 41 1/2 cents a pound cash for beeswax or 43 1/2 cents in trade.

(:15) It may be the squeaky wheel that gets the first grease. but wait till it stops to grease it. Many a man who insisted on taking a short cut in labor to oil or grease machinery in motion took a short cut to the hospital. Remember it can happen to you, and we need you in



our fight for freedom. Let's remember to stop the machine and throw it out of gear for all adjustments as well as oiling or greasing.

(:30) It's still good business to look out for the European corn borer in late plantings of sweet corn, says H. B. Petty, extension entomologist, University of Illinois College of Agriculture. So keep a sharp lookout for eggs on the underside of the upper leaves and pick them off. Although there are insecticide recommendations for large sweet corn growers---such as canners and truck gardeners---these insecticide materials are costly and scarce for the home gardeners to use. The masses of European corn borer eggs can be easily destroyed in small plantings by merely rubbing the thumbnail over the top of them.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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SIXTY-THIRD
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

THE LIBRARY OF

Speaking time: 3 minutes

SEP 20 1943 August 9, 1943

(FOR BROADCAST USE ONLY) UNIVERSITY OF ILLINOIS

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:00) To carry the record numbers of livestock through the winter, farmers will need every bit of feed they can get. They will need to keep any feed from going to waste.

In some places, drought, heavy rains, or early frost may damage immature crops of corn or sweet sorghum and hay crops of grasses and legumes. Feed specialists of the University of Illinois College of Agriculture and the U. S. Department of Agriculture urge farmers to save those crops as silage if it's at all possible.

Of course, grasses and legumes have more feed value if harvested before they are mature. And experiments show that, by modern methods, farmers can make these immature crops into silage safely and economically.

The feed specialists emphasize the value of this silage in dairy regions in particular. These immature crops contain more protein and less fiber and they also contain more carotene that the cow turns into vitamin A, the vitamin that helps increase the calf crop, cuts calf losses and increases the health value of the milk.

Farmers can put up as silage any hay crops and any extra pasture crops they may have.

They can feed the grass or legume silage not only to dairy cattle, beef cattle and sheep, but also a certain amount to horses and mules.



By making silage they prevent waste, cut down on the feed bill and avoid the danger of farm fires which sometimes break out in poorly cured hay.

(1:00) Nowadays we don't mind being left holding the bag-- literally speaking, that is. Of course, we don't want to hold too many of them and be accused of hoarding. Furthermore, by getting them back into channels for other folks to use again, we can help a lot to relieve this bag shortage. For instance, we can sell them to second-hand bag dealers. Or we can send them to the "bag exchange" sponsored by County USDA War Boards in cooperation with bag dealers, feed stores, country elevators and other local business establishments.

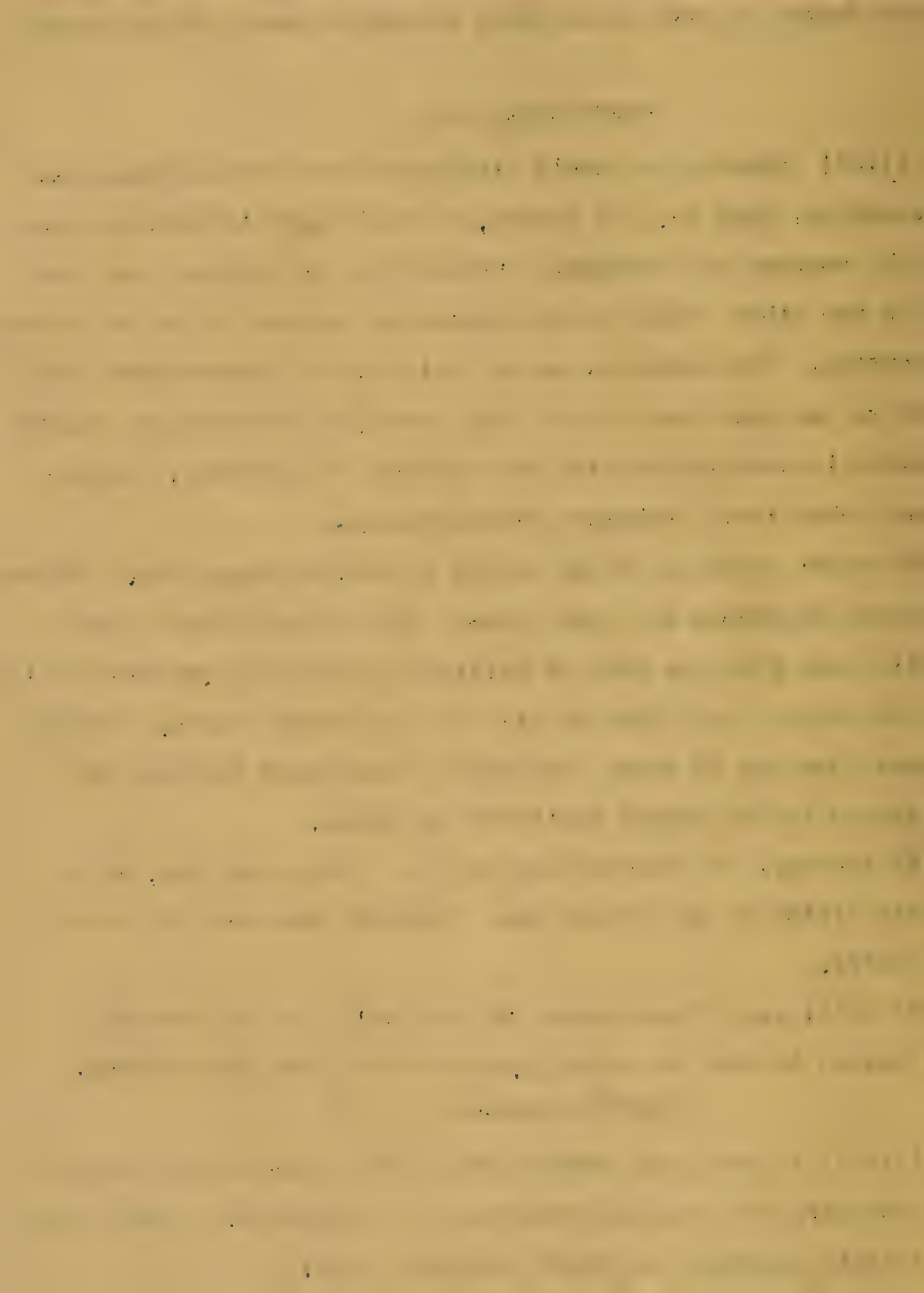
We might check up on our method of storing bags, too. Naturally they should be stored in a dry place. It's a good idea to hang them on a wire away from the wall or ceiling so that rats and mice won't chew them. It isn't a good idea to pile them on cement floors, or where dirt and grease can get to them. And keep in mind that the bags are empty when stored so the fabric won't rot and decay.

By the way, the correct way to open a bag, you know, is to pull the chain stitch at the proper end. Probably too many of us cut them with a knife.

If we'll keep these things in mind we'll be left holding enough bags needed to send to market more food and feed for victory.

(1:00) A good many farmers around towns and cities deliver such things as dairy and poultry products, and vegetables, direct to the doorsteps of their customers in their passenger cars.

Some of these farmers have been asking about regulations on gasoline for such deliveries.



The War Food Administration gives the answer for farmers in states outside the eastern gasoline shortage region.

Farmers in all but the eastern shortage region have "A" cards good for 240 miles of driving a month. War Food officials explain that 150 of the 240 miles on the "A" card are available for occupational driving, including delivering farm products at retail. If a farmer needs still more gasoline, he can get a supplemental ration that will provide up to 720 miles of occupational driving a month. If he wants to, he can use all of that 720 miles in delivering products to his customers in town.

Besides the gasoline he gets on his "A" card and in his supplemental ration, a farmer can get the gasoline he needs for his car to run his farm; that is, to deliver products wholesale, or to retail stores or public markets and to haul farm supplies and farm workers.

So, farmers outside the eastern gasoline shortage region can get gasoline for up to 720 miles of driving to deliver products to the homes of customers in town, in addition to what they need in connection with the operation of their farms.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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SIXTY-FOURTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
(U. S. Department of Agriculture)

Speaking time: 4:30 minutes

August 12, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:30) In peacetime, beekeepers usually wait until spring before they sell wax.

This year, with the big demand for wax for war products, the government is asking beekeepers to cull the combs and clean up the hives just as soon as they harvest their honey.

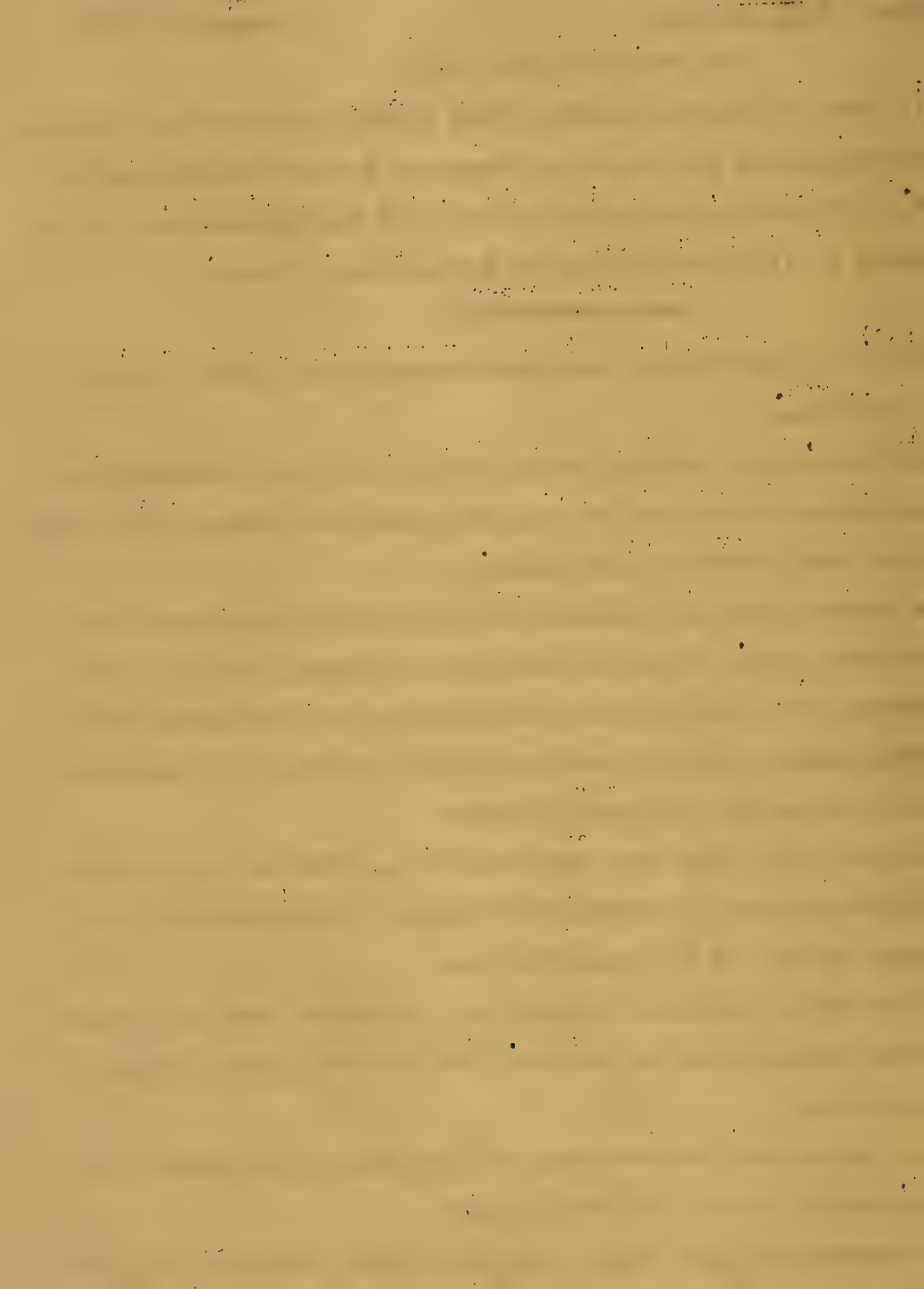
Bee specialists urge beekeepers to take particular care of the combs and wax this year. After you extract the honey, put the combs out on the strong hives for the bees to clean out all the honey still sticking to the combs; that is provided all the colonies are healthy, so there is no danger of spreading disease.

After the combs are dry, cull the combs. The bee specialists ask the larger beekeepers in particular to cull a little closer than usual this year because of the need for wax.

Put the combs you want to keep in a mothproof hive to protect them from damage between now and spring. Lay all the poorer, broken combs aside to sell.

Also, scrape off and save any wax sticking to the hives and frames. Only, don't include any "bee glue."

Some beekeepers melt down their wax before they sell it. But the companies that handle beeswax would just as soon have it in pressed form.



The wax is now bringing 41 1/2 cents a pound cash and 43 1/2 cents a pound in trade. So, by saving and selling all their wax, beekeepers not only can help along with the war program but also can make some money.

You can sell beeswax to any dealer or company that handles beekeeping supplies. If you don't know of a dealer or company yourself, get in touch with one of the larger beekeepers in your neighborhood.

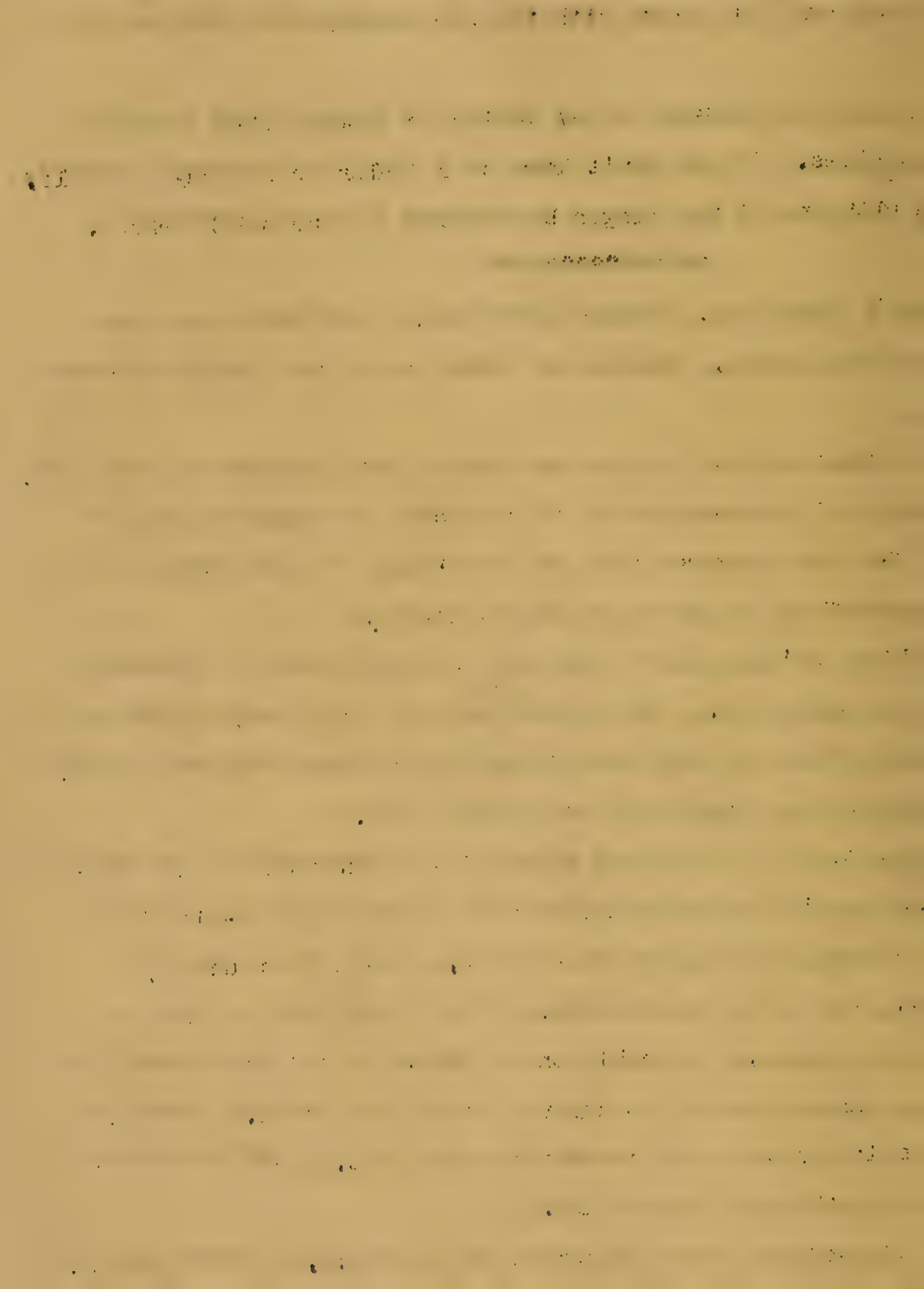
(1:00) This year, farmers with good, tight silos can save a lot of feed from grains, grasses and other crops that might otherwise go to waste.

The farmer without a silo may find it will pay him to build one. A permanent silo is recommended if it is needed for regular use year after year. But for emergency use and especially to save forage this year, the temporary silo may be the best solution.

One type of inexpensive silo used in many parts of Illinois, is the wire and paper silo. It is made/^{much}like the temporary, round corn crib, using snow fence or wire mesh rings strengthened with wire bands. The fence sections are lined with waterproof paper.

Another type of temporary silo that is even cheaper and simpler to build--that doesn't necessarily take any material at all--is the trench silo. Farmers throughout the country, where the ground is reasonably dry, are using trench silos. The trench silo is just a trench dug in the ground, preferably on a slope, or at least where the drainage is good and where it is easy to remove the silage. Quite a little of the silage may spoil in the temporary silo. But a temporary silo is far better than no silo at all.

For information about the wire and paper silo, trench silo and other types of temporary and permanent silos, address your request to this station.



(1:00) A silo can help save any feed crops that fail to mature.

If handled right, any green forage crop will keep in good condition as silage without much loss of feed value.

Of course, corn is the main silage crop in the corn-growing regions. Farmers lose less of the corn putting it up as silage than in shocking it. What's more, livestock eat only a little more than half of the corn plant as fodder, as against the entire plant as silage. Other good silage crops include the sorghums and Sudan grass.

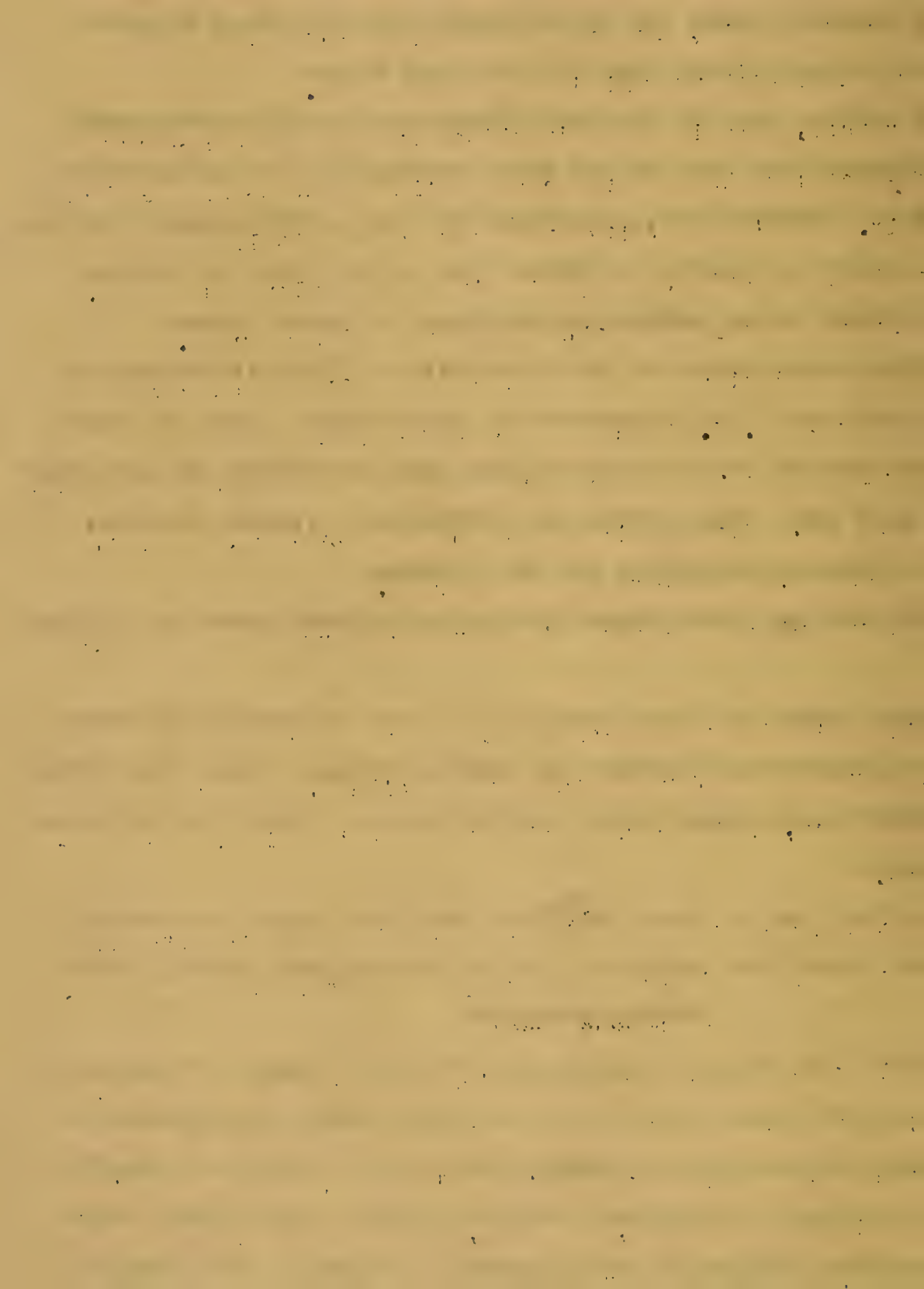
Forage specialists of the University of Illinois College of Agriculture and the U. S. Department of Agriculture point out that legume crops also are suitable for silage when conditions are not right for making good hay. They mention in particular soybeans, cowpeas, alfalfa, the clovers, lespedeza and the vetches.

And more and more farmers are using ordinary grass as a silage crop.

Then, there is a wide variety of other products in various parts of the country that farmers can save as silage. Pean vines from canneries, beet pulp, apple pomace and wet brewers' grain are all useful for silage.

The full use of these and other available feed products will help ease the tight feed situation now in prospect this coming winter.

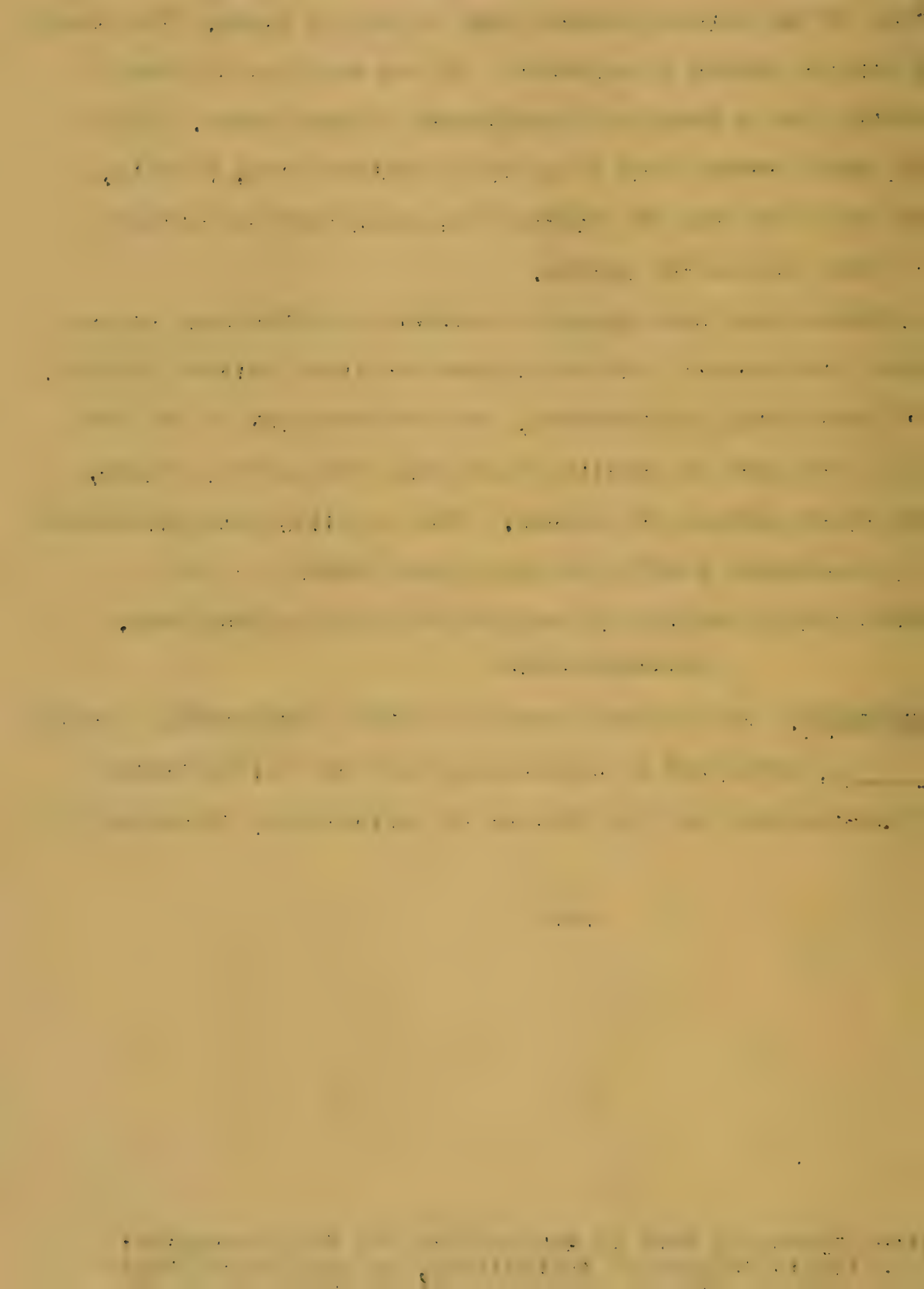
(1:00) In the past few weeks we've had a number of complaints on a stripped soft bodied beetle that has been coming into gardens in swarms. These beetles appear overnight and "in no time flat" they've stripped the foliage of tomatoes, potatoes, beans or some other vegetable. Of course, the reason they appear in one day is that they fly in swarms, and when they land in your garden, they mean business.



Now this old-fashioned potato beetle, or the blister beetle--that's its new name--is a yellow beetle with black or brown stripes on its back. Some of the blister beetles may be gray or black. The reason for the name blister beetle is apparent. If you mash one of them on your body, you'll find a large and troublesome blister forms. While they feed, the whole swarm seems to go in a straight line, that is, they may start up a few rows of potatoes and clean them out without touching any other area in the garden.

If potatoes have been sprayed regularly with Bordeaux mixture for leafhoppers, they aren't bothered so much by these blister beetles. If you haven't been using any Bordeaux, the best material to use for their control is one part of cryolite dust with four parts of flour, or you may use flour instead of sulphur. This cryolite material should not be used on vegetables you'll eat right away unless you plan on doing a thorough job of washing the vegetables before consumption.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.



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SIXTY-FIFTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

THE LIBRARY

Speaking time: 4:30 minutes

SEP 26 1943

August 16, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:00) Forty-three million pounds of milk at a cost of more than three-quarters of a million dollars are being wasted annually because of careless handling, says J. H. Hetrick, dairy specialist, University of Illinois College of Agriculture. This quantity is sufficient to supply 120,000 troops with milk for one year. In fact, it represents the production of about 12,000 cows and requires the labor of almost 1,200 people to milk the milk that's deemed unfit for market purposes.

Now, of course, we realize no one would deliberately waste food, and we know that everyone of us wants to do his job well. So let's glance at some of the things Hetrick suggests that are important in the production of quality milk.

First of all, we should have healthy cows and healthy milkers. Cows should be tested regularly for tuberculosis and Bang's disease. Cows affected with mastitis should be removed from the herd. Also, a milker who is a carrier or who is ill with a contagious disease may be most dangerous. Clean barns, clean cows, and clean utensils are needed. And last but not least, cooling the milk to a low temperature, preferably below 50 degrees, is desirable.

Let's keep in mind that carelessness in milk production, as in any vital war industry, impedes our country's progress.

(1:00) Under the fertilizer allocation program, sulphate of ammonia is being reserved for the preparation of mixed fertilizers and will not be available for direct applications, according to Dillon S. Brown, horticulturist of the University of Illinois College of Agriculture. Therefore, many apple growers will be using a new material, ammonium nitrate, which is being released for direct applications instead of the more familiar sulphate of ammonia. Small amounts of nitrate of soda and cyanamid will also be available in addition to the ammonium nitrate.

Ammonium nitrate contains about 33 per cent nitrogen, or twice as much as nitrate of soda. In general, a broadcast application at the rate of one-eighth pound a year of tree age should be satisfactory. At that rate a twenty-year-old tree would receive two and one-half pounds. The cost of ammonium nitrate, for each unit of nitrogen content, is the same as sulphate of ammonia.

One difficulty with ammonium nitrate is that it may not stay in a readily usable form, as it absorbs moisture and may cake up quickly. Growers should not plan to store the material for a very long period, or, if it is stored, they should be sure to keep it in a cool, dry place.

Growers should order their fertilizer at once, while the supplies available are known to be good. Fall applications are recommended.

(1:00) Now for a report on the national food situation as outlined by agricultural economists.

Taking their usual midsummer look over Uncle Sam's farm, the economists see more land in crops than last year, but those crops don't look like they will yield as well as they did. But then the economists notice more livestock on your Uncle's farm. They figure the extra stock will more than offset the lower yield of field crops.

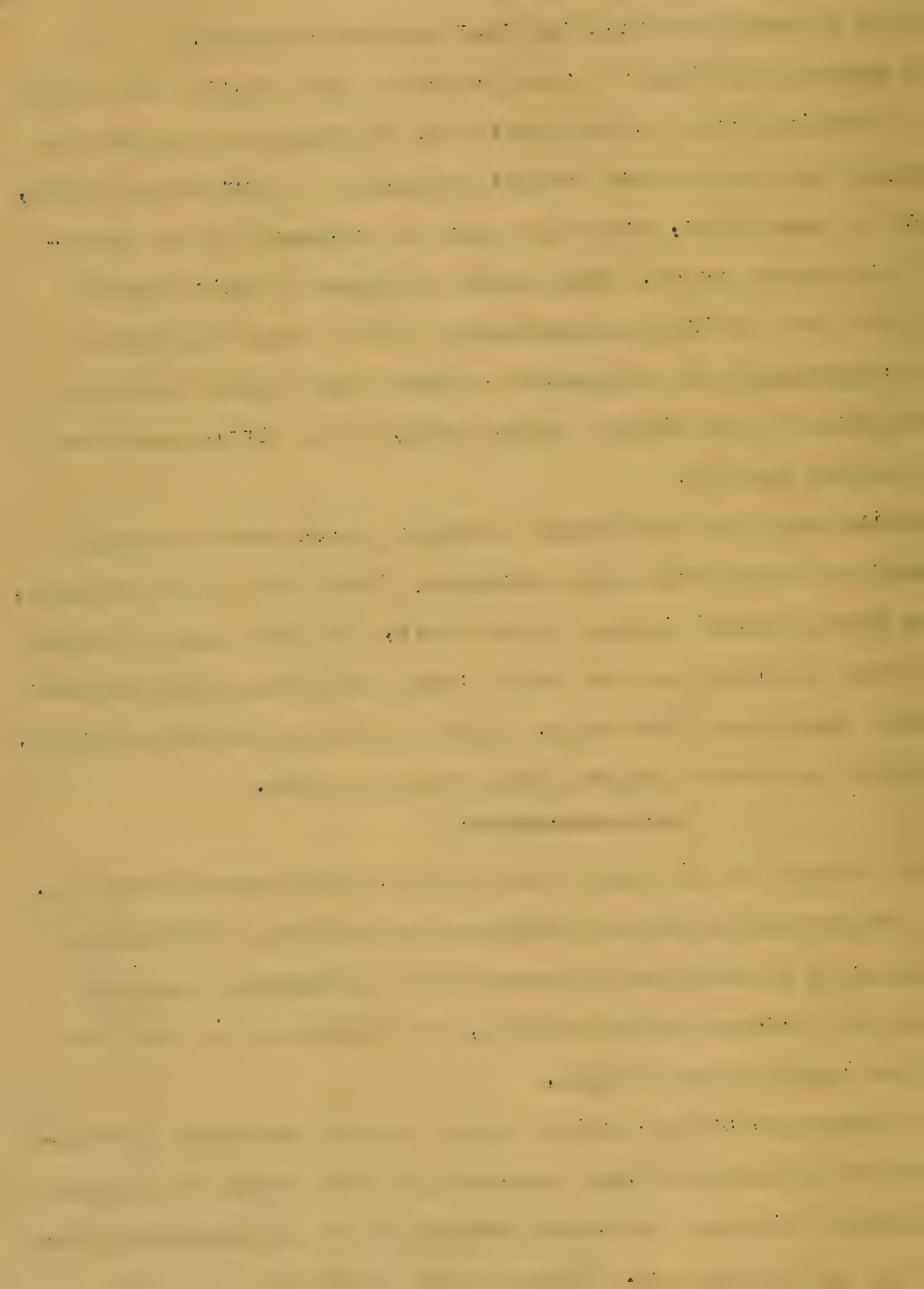
In fact, they say the farm will produce even more food this year than last year. And remember, last year broke the all-time record. So it looks as if this year will top that wonderful record.

Of course, that doesn't mean people in this country will have more food. Civilians have to share with our fighting men and our allies. Thirteen per cent of our production will go to our armed forces, ten per cent to lend lease, and 2 per cent for shipment to our territories and for special needs. That means civilians in this country will get 75 per cent of the record-breaking total. Figuring right down to the individual, the economists estimate the average civilian will get less than in our biggest eating year, but a little more than the average before the war.

Looking over the prospective civilian larder more closely, the economists see more pork, eggs, chickens, fluid milk, fats and oils, fresh citrus fruit, canned juices, dried fruit, potatoes and dry edible beans. But they see less beef and veal, lamb and mutton, fish and most dairy products other than fluid milk. Also less fresh and canned fruit, fresh and canned vegetables, sugar, rice, tea and cocoa.

(:45) August is the time to vaccinate flocks against fowl pox, cautions the department of animal pathology and hygiene, University of Illinois College of Agriculture. Losses in egg production traceable to an outbreak of fowl-pox can be avoided, if vaccination is done before the winter laying season begins.

The advantages of protecting flocks against fowl-pox, particularly on farms where outbreaks have occurred, by the annual vaccination of all susceptible chickens are being recognized by an increasing number of Illinois poultry raisers. These better poultrymen are taking no chances of failing to meet the required egg production goals in our fight for freedom.



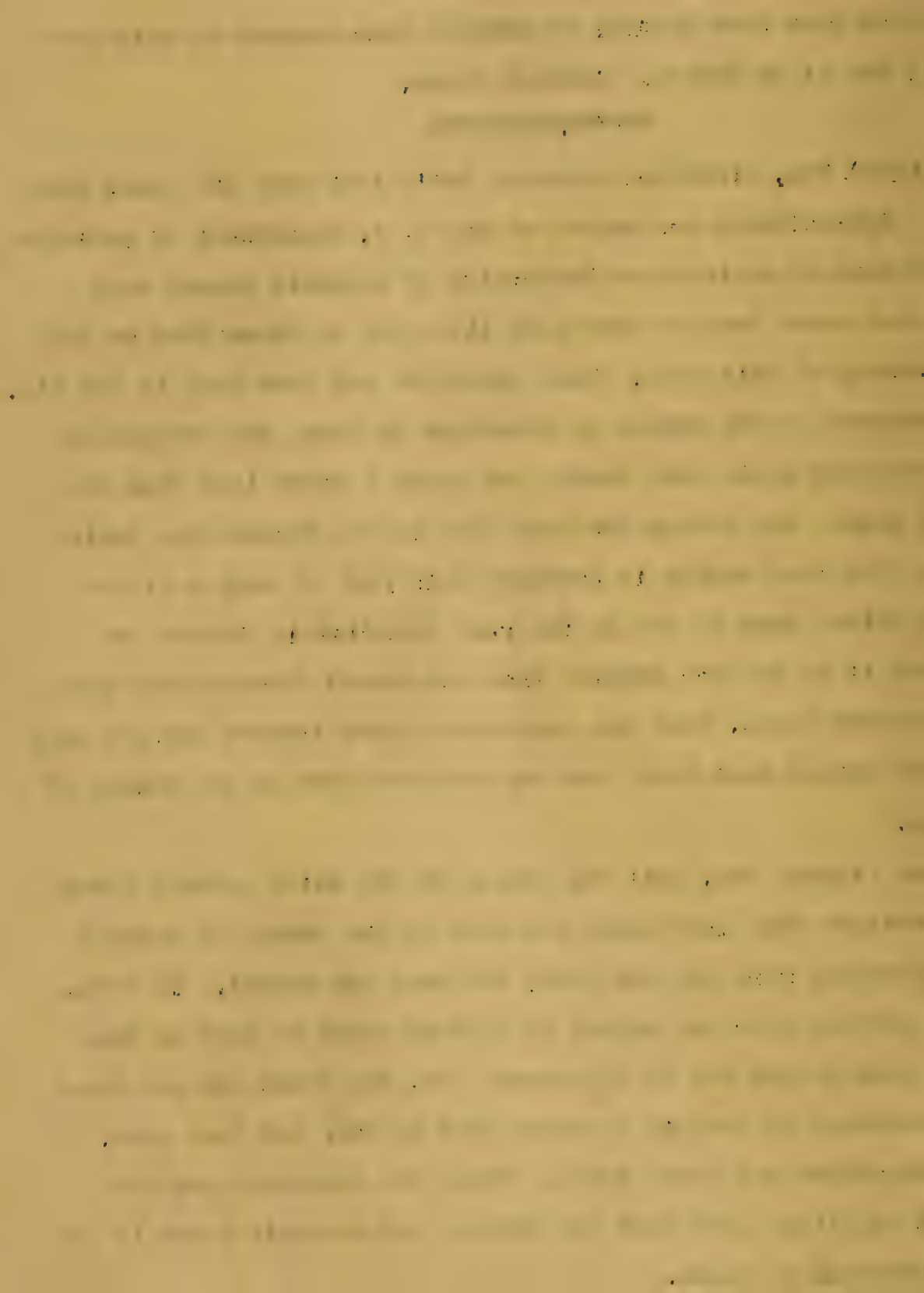
For further information on the prevention and control of fowl pox, we suggest that you see Illinois Circular 430. You may obtain a free copy from your farm adviser or address your request to this station. Call for it by number, circular 4-3-0.

(1:00) Now, livestock growers, let's look over the fence into next year. Agricultural economists of the U. S. Department of Agriculture and College of Agriculture University of Illinois expect next January to see about ten per cent more livestock on farms than we had at the beginning of this year. More livestock and less feed in the bin.

Compared to the number of livestock to feed, the economists estimate less feed grain than usual, and about a fifth less than the supply last year. But during the past five years, farmers fed their stock well. The feed supply in prospect this year is only a little smaller per animal than it was in the year immediately before the drought. But it is so much smaller than the amount farmers have been feeding in recent years, that the economists think farmers may not only feed less per animal next year, but may also cut down on the number of meat animals.

They figure, too, that the supply of the chief protein feeds will prove smaller than last year, compared to the number of animals on feed. Actually, more protein feed, but less per animal. In fact, they expect protein feed per animal to be down about as much as the decrease in feed grains fed to livestock. So, the stock can get about the same percentage of protein in their feed as they had last year.

Next winter and early spring, then, the prospects are for smaller feed supplies, less feed per animal, and possibly a cut in the number of livestock on farms.



(1:00) There's no "closed season" on domestic rabbits.

Furthermore, unlike wild rabbits, domestic rabbit meat can be eaten at any time of the year, says R. E. Yeatter, game specialist, Illinois State Natural History Survey.

We want to keep in mind that hutch-raised rabbits do not contract tularemia. In fact, it's rather unfortunate that we even compare the domestic grain-fed rabbit to his cousin--the cottontail or hare. The meat of the domestic rabbit is all white, like the breast of a chicken, and both in color and flavor is so superior to wild rabbit that there's little comparison.

Since meat is short, a backyard rabbitry can bolster the supply without requiring ration points. A doe will produce about four litters a year, of seven to eight each. At two months, fryer rabbits should dress about two and one-quarter pounds. About seventy-seven per cent of the product is edible, too.

We have a number of rabbit recipes, such as rabbit a la marnego, arabecued rabbit and wartime rabbit casserole, which we'll be glad to send you free on request. If you're interested in receiving a copy of these, or information on the raising of domestic rabbits, address your request to this station.

LOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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University of Illinois College of Agriculture, and the United States
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SIXTY-SIXTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
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U. S. Department of Agriculture

Speaking time: 5:30 minutes

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August 19, 1943

SEP 10 1943

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UNIVERSITY OF ILLINOIS

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

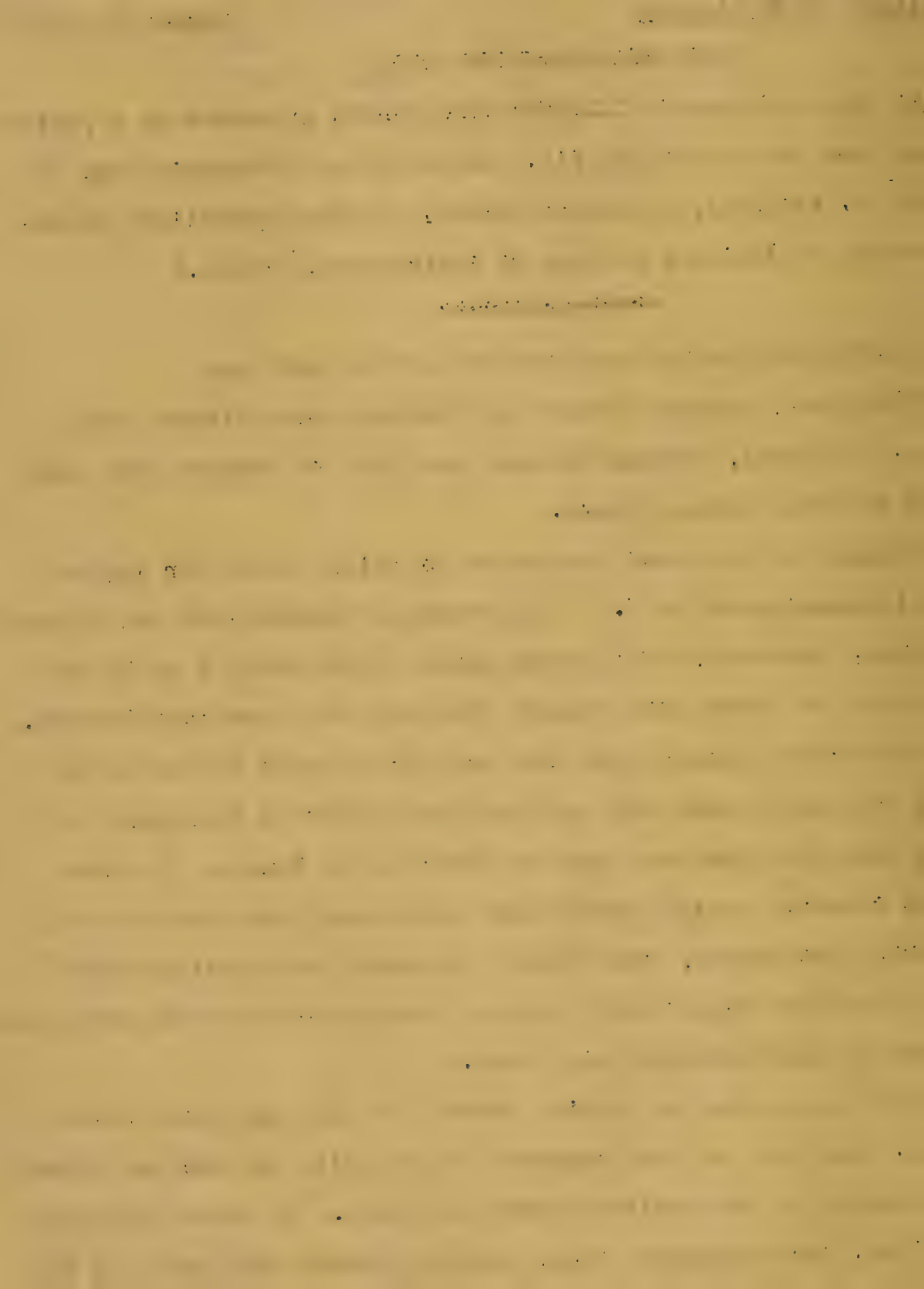
(1:00) Now for the prospect for poultry and eggs.

This year, poultry farmers are raising more chickens than ever before. As usual, between now and the first of January they will add pullets to their laying flocks.

Judging by the usual proportion of chicks saved for layers, agricultural economists of the U. S. Department of Agriculture and College of Agriculture, University of Illinois would expect about 8 to 10 per cent more layers on farms next January than were on farms last January.

But whether farmers add that many or not will depend on how this year's feed crops turn out, and whether farmers in some parts of the country have room for more hens in their laying houses. In some parts of the country, laying houses were overcrowded this past season. But this spring and summer, many farmers expanded their laying house capacity, so the feed supply will probably turn out to be the main influence on the number of layers farmers will keep.

This year, with the growing demand for eggs and price ceilings on feed, the price of eggs compared to the price of feed has proved the most favorable to the poultry farmer on record. If those favorable prices continue, the economists think poultry farmers will save all the layers they can feed and house.



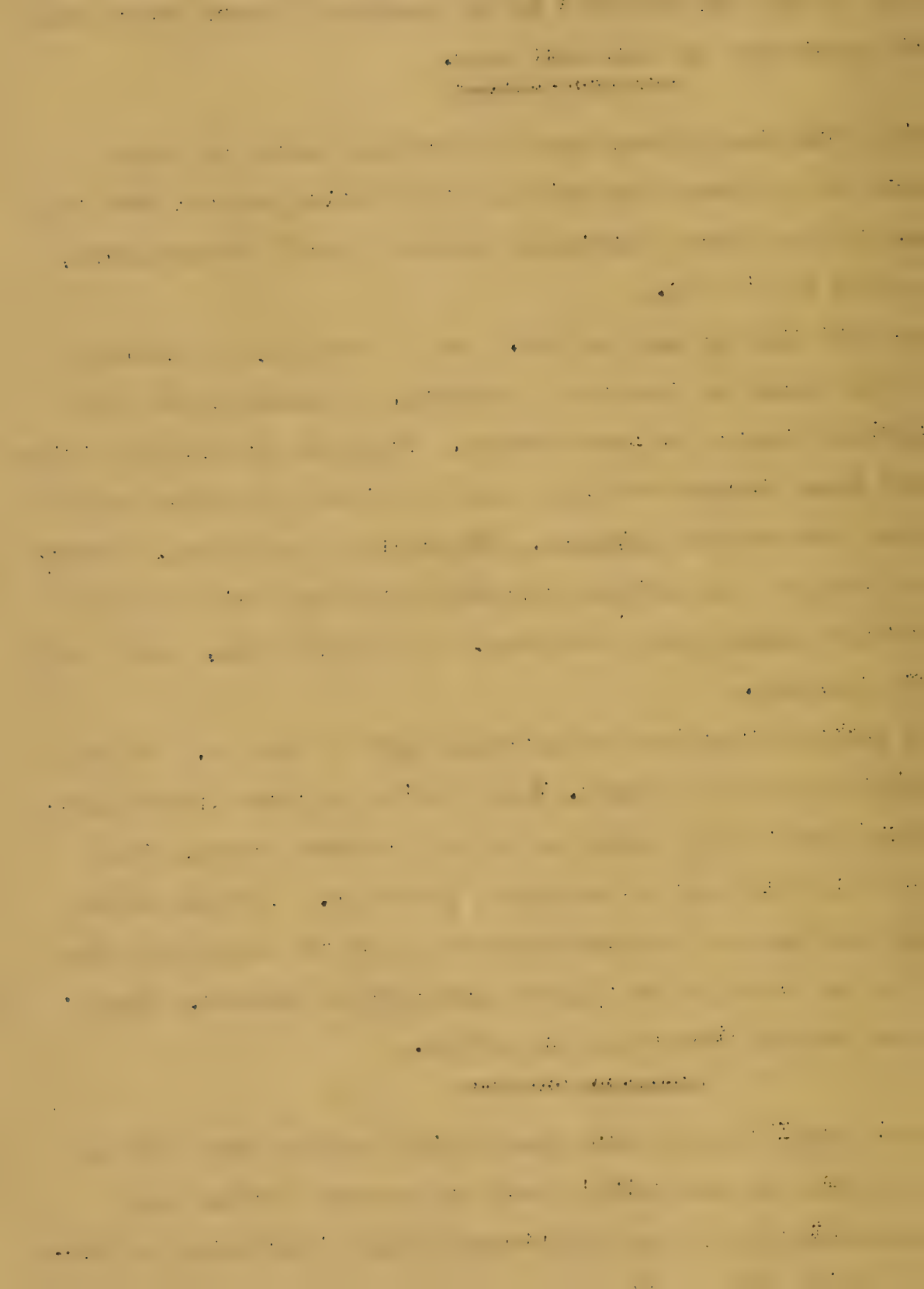
So here in midsummer looking ahead to next year, it seems that the record number of pullets being raised this year provides a foundation for another big increase in the number of layers and a still bigger record production of eggs next year.

(:45) The Armed Forces want ten million pounds of turkey meat in August and September for shipment to fighting men all over the world so they can have this traditional holiday food on Thanksgiving, Christmas and New Year's Day.

The goal must be met in time. As a safeguard, a temporary embargo has been placed on the sale of turkeys. Processors may sell only to authorized buyers for Armed Forces. This embargo will be lifted as soon as the Armed Forces have been able to get all the early season birds they need for overseas shipment. Wholesalers, retailers, restaurant and hotel keepers and civilian consumers have been asked not to sell, serve or eat turkey for a few weeks. After this time, there will be plenty for everybody.

The turkey farmer has an important part of the job. First, market a portion of your crop early. Then, don't let yourself be tempted or bribed by black market buyers who offer fabulous prices. Make sure the birds you sell reach a legitimate processor. Anybody would prefer to sell his turkeys to a buyer whom he knows is processing them for shipment to our soldiers and sailors and marines overseas. They deserve the best holiday dinner we can provide.

(1:00) Many Illinois hemp growers will cash in this fall on lessons learned from the University's soil experiment fields, says A. L. Lang, assistant chief, soil experiment fields, University of Illinois College of Agriculture. For years these fields have been



demonstrating to farmers that the proper use of limestone, rock phosphate and legumes in rotations would produce top-quality, high-yielding crops.

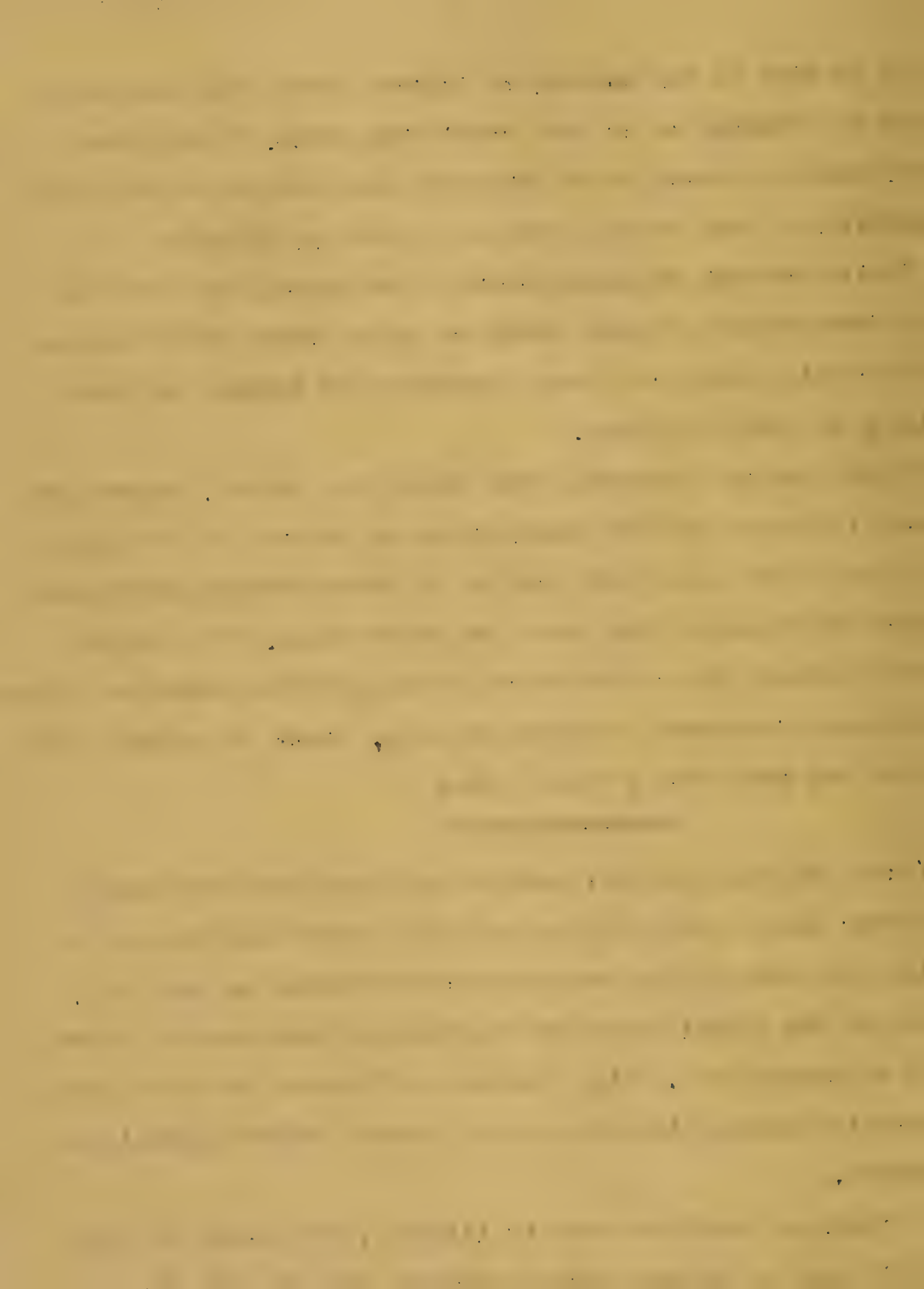
At no time in the history of Illinois farm crops have these lessons been so striking as in this year's hemp crop. From present observations hemp is proving to be the most sensitive to variations in soil productivity of any general farm crop grown in Illinois.

Visits through the hemp-growing areas during the past few weeks found those fields of hemp likely to grade number two or better being grown on soil where limestone, phosphate and legumes had been used regularly in past rotations.

Proper use of limestone, rock phosphate, potash, legumes and crop residues increased the 1942 corn yields an average of 35 bushels an acre on the 21 soil experiment fields. In these studies practically all the major soil types of the state are represented. They extend from the very southern tip of the state to the northern boundary. Likewise soybeans were increased 9 bushels an acre, wheat 16 bushels, oats 17 bushels and hay more than a ton an acre.

(1:45) Whether you will need to hold more than 100 bushels of corn for your early spring pigs or only 55 bushels will depend on the provision you make between now and about September 1, says W. E. Carroll, head of the animal husbandry department, University of Illinois College of Agriculture. Pigs farrowed in February or early March must be raised to weaning without suitable pasture unless special pasture is provided.

In tests at the University of Illinois, 100 pounds of gain on sows and litters fed on rye pasture required only 55 per cent as much corn as the same gain did on similar sows and litters fed in



drylot. A similar saving in protein supplement was also realized from the rye.

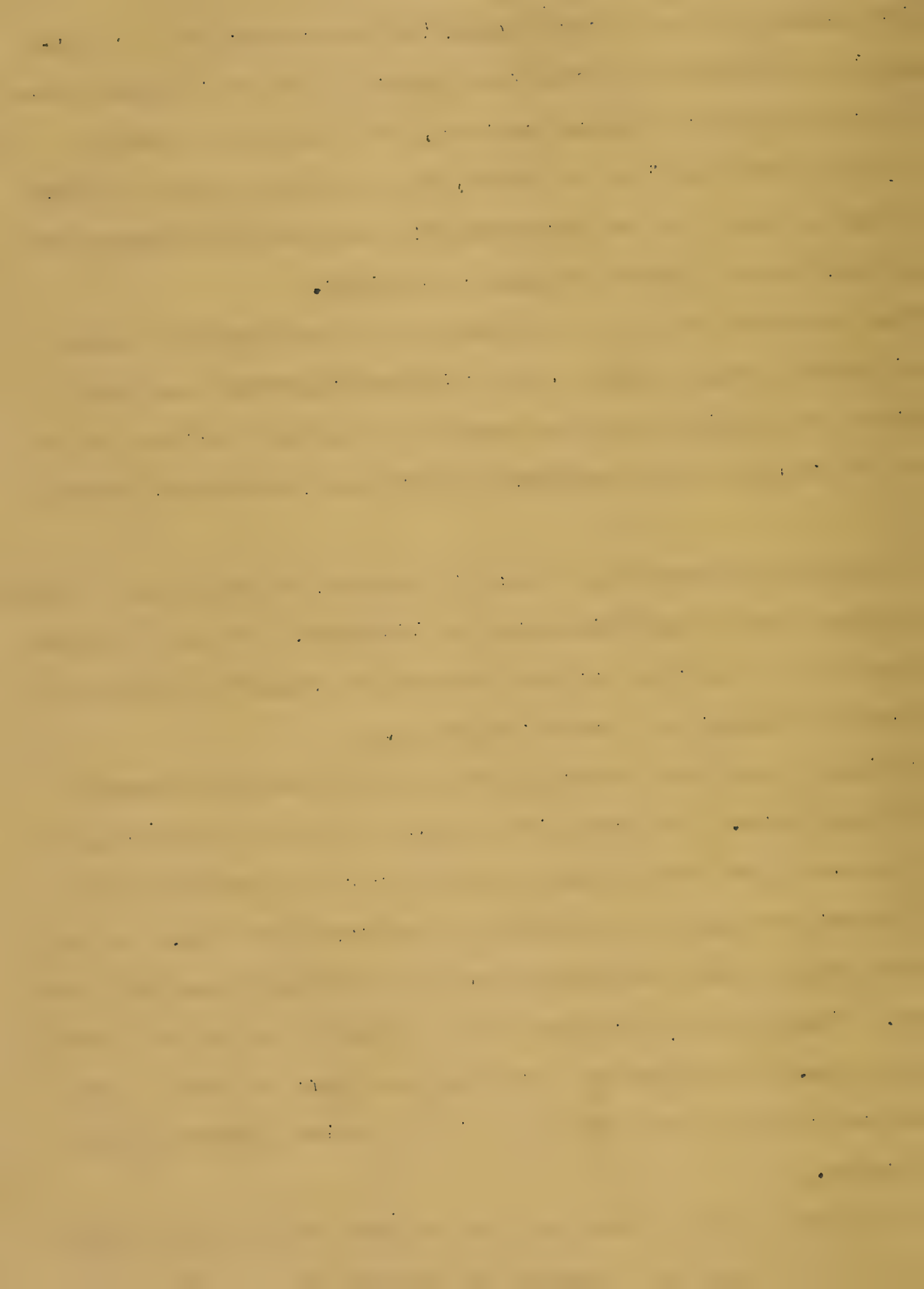
By seeding the rye early enough (before September 1 in central Illinois) to permit it to grow to a height of 10 or 12 inches before growth is stopped by freezing weather, the fall growth can be taken out of "cold storage," so to speak, before growth begins in the spring. In the central part of Illinois this means that pasturing can be begun by about March 1 under average conditions.

Ten to twelve full-fed sows and litters an acre will graze off the fall growth between March 1 and the time vigorous new growth begins. After new growth begins the number of sows and litters can be increased to 14 or 16 an acre, depending on growing conditions, Carroll states.

These numbers have been regularly carried on the good, fertile land of the swine farm at the University of Illinois. On less fertile soil or in case of a poor stand of rye, the numbers should be reduced in accordance with the amount of forage available.

In these tests rye grazed in this way has shown an almost unbelievably high value. Compared with raising the pigs in drylot, the rye pasture saved 45 per cent of the corn and an equal proportion of protein supplement for unit of gain made on the sows and pigs. An acre of rye so used saved almost 100 bushels of corn and more than 500 pounds of supplement. This land is rich and would produce probably 100 bushels of corn to the acre. The point is, however, the average value of an entire season was realized from that land in a grazing period of only six or eight weeks.

Unless the spring is too dry (or too wet) the area used for rye pasture can be prepared and planted to soybeans or even to corn in the more favorable seasons, as the pigs are transferred to other pasture when it becomes available.



In addition to the saving of feed, death losses of sucking pigs are considerably lower on rye pasture than in drylot and the pasture pigs are more thrifty and are heavier at weaning, and are accordingly in better condition than the drylot pigs to make rapid and economical gains in the fattening lot.

(1:00) Although farmers are hard pressed for time and help, pasture specialists of the University of Illinois College of Agriculture and the U. S. Department of Agriculture say that livestock growers have found that regular mowing of permanent pastures to keep down weeds more than pays for itself. A mowed pasture sometimes carries up to nearly twice as many head of stock as the same pasture grown to weeds. The mowing encourages the grasses to grow, and also allows the stock to get more desirable pasture.

Experiments have shown that farmers also can get more grass from their pastures by giving part of the pasture a rest from time to time, that is, by rotation grazing. The rest makes for a stronger stand of legumes and a thicker turf. As a result of the improvement in the pasture, high-producing cows actually give more milk.

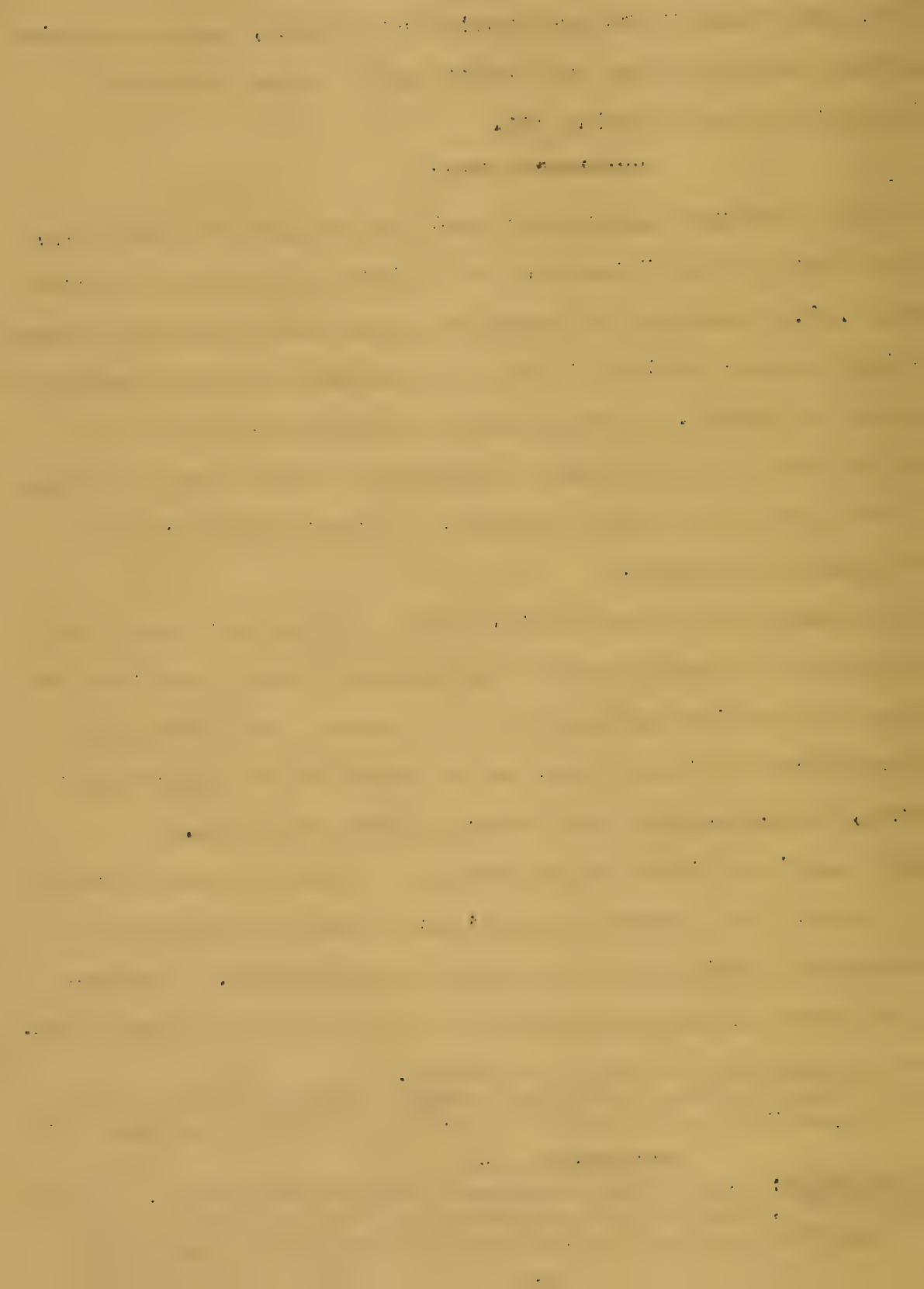
But there's a limit to the number of stock that even the best pasture will carry. The pasture specialists caution in particular against overstocking during the dry period of late summer. They explain that temporary pasture crops take some of the load off the permanent pasture and help keep up milk production.

As a general guide, they also suggest leaving about 3 inches of grass on the pasture in the fall. It will mean better pasture next spring.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture, and the United States
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630.1
Tel 661
SIXTY-SEVENTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
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August 23, 1943

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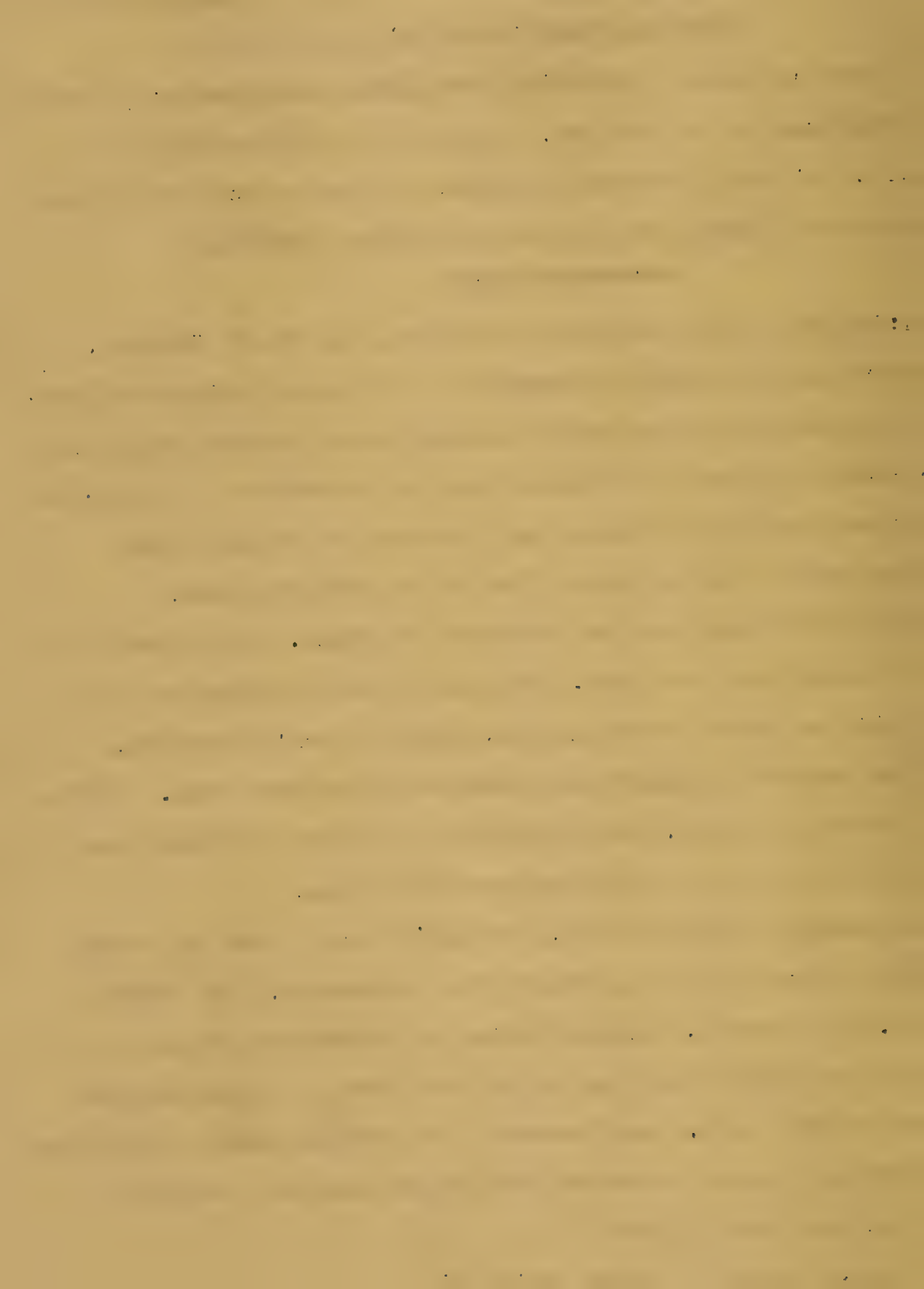
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(1:00) Ship early and avoid the rush, says E. T. Robbins, livestock extension specialist, University of Illinois College of Agriculture, in cautioning Illinois swine growers for an orderly marketing of the 1943 spring pig crop. He points out the situation is likely to be serious unless more of us follow the practices of better swine growers and get those hogs to market "while the gettin's good."

Here's the logic back of Robbins' reasoning. Processors can handle only so many hogs at a time. That was true even when we had 100 per cent skilled labor to do the job, which we don't have now. Furthermore, we have 22 per cent more hogs to handle this year. Third, look to your own feed supply. All this adds up to the fact that the next 60 days will be an ideal time for marketing hogs.

Just another thought, here. We won't gain a dime by holding marketable hogs in the way of expectant price increases. The OPA's ceiling is \$14.75 a hundred, Chicago basis. A packer can pay more for hogs today if he can slaughter them right away than he can if he carries them four or five days. And remember any carrying charge is deducted from the check returned to us and that might lose us a number of our bonds, if we sold enough hogs.

Yes sir, folks. It looks as if we'd better send those pig-
gies to market, the ones that are ready, and we'd better send them
right away.



(1:00) Some farmers may need emergency silos in a hurry this summer, to save a crop that might otherwise be lost.

If they can get the materials, they can build silos on level ground with welded wire mesh or picket, snow and woven-wire fencing.

Specialists of the University of Illinois College of Agriculture and the U. S. Department of Agriculture say fence silos are best when they are about as high as they are wide. To cut spoilage in these fence silos, they should be lined with tough, waterproof paper.

Reasonably good results can be obtained with a silo built of bales of straw reinforced with wire, or of a circle of corn bundles. With this type of silo, the silage has to be chopped to keep down spoilage. But when handled right, the spoilage is limited mainly to the outside.

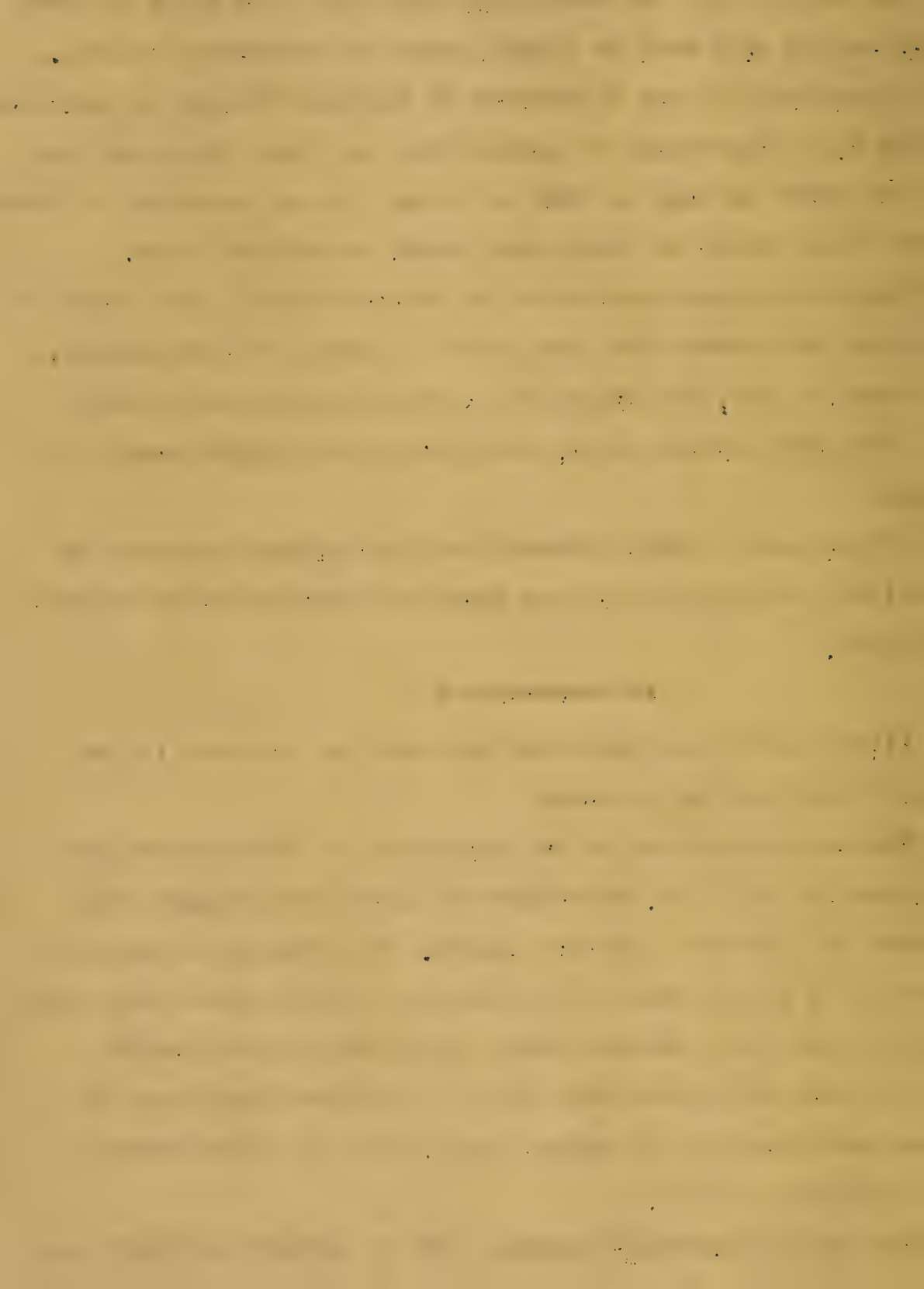
If you want further information about either temporary or permanent silos, you can get it from your farm adviser, or by request to this station.

(1:00) Let's look ahead and see what the prospect is for getting more feed from the pastures.

Pasture specialists of the University of Illinois College of Agriculture and the U. S. Department of Agriculture suggest that farmers check all pasture land this summer. Find the spots where the grass is thin. A little lime and fertilizer on those spots early this fall will save the grass already there, and stimulate new growth.

In fact, the specialists say that lime and fertilizer on pasture pays more profit, per dollar spent, than any other method of increasing supplies of feed.

For the "lime-loving" legumes, such as alfalfa and sweet clover, it is a good idea to apply the lime six months to a year ahead of



planting. But, for other legumes, you can apply the lime at the same time you apply the phosphates and other materials.

Many states have laboratories to test samples of soil and report back to farmers what the soil needs in the way of lime and fertilizer. But the sample has to be taken carefully. The specialists suggest that farmers check with their farm adviser, ^{who is the} county agricultural agent, or write this station.

The right kind of liming and fertilizing of the thin spots will save the grass already there, and stimulate new growth.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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SIXTY-EIGHTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
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Speaking time: 4:15 minutes

SEP 20 1943 August 26, 1943

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(1:45) Give the silo a thorough check-up before filling time and save many dollars worth of feed this winter. This is the suggestion of W. B. Nevens and D. G. Carter of the University of Illinois, College of Agriculture. Much of the spoiled silage is due to air leaks in the silo. A few hours of careful work on repair will stop the leaks.

Before filling begins, sweep down any silage clinging to the walls and clean the floor. Wood doors may need renailing and the addition of felt strips along the sides of the door. During the filling process, light roll roofing, a 30-pound felt paper or reinforced waterproof paper may be unrolled upward against the inside of the doors. The silage holds the paper in place and helps to seal small cracks in the doors. The paper should be about three feet wide to overlap the doors on each side. The length should be sufficient to extend from the bottom to the top of the silo.

If tile or concrete-stave silos show signs of mold along the joints, it is an indication of leakage at the joints. A low cost method of treatment is to use ordinary household paraffin to seal the joints. Fifteen to twenty pounds is sufficient for an average silo. The paraffin is melted and applied to the joints with a brush. Since the material hardens quickly, the application may be made as the silo is filled. Hot paraffin is inflammable, and care is necessary in melting it.

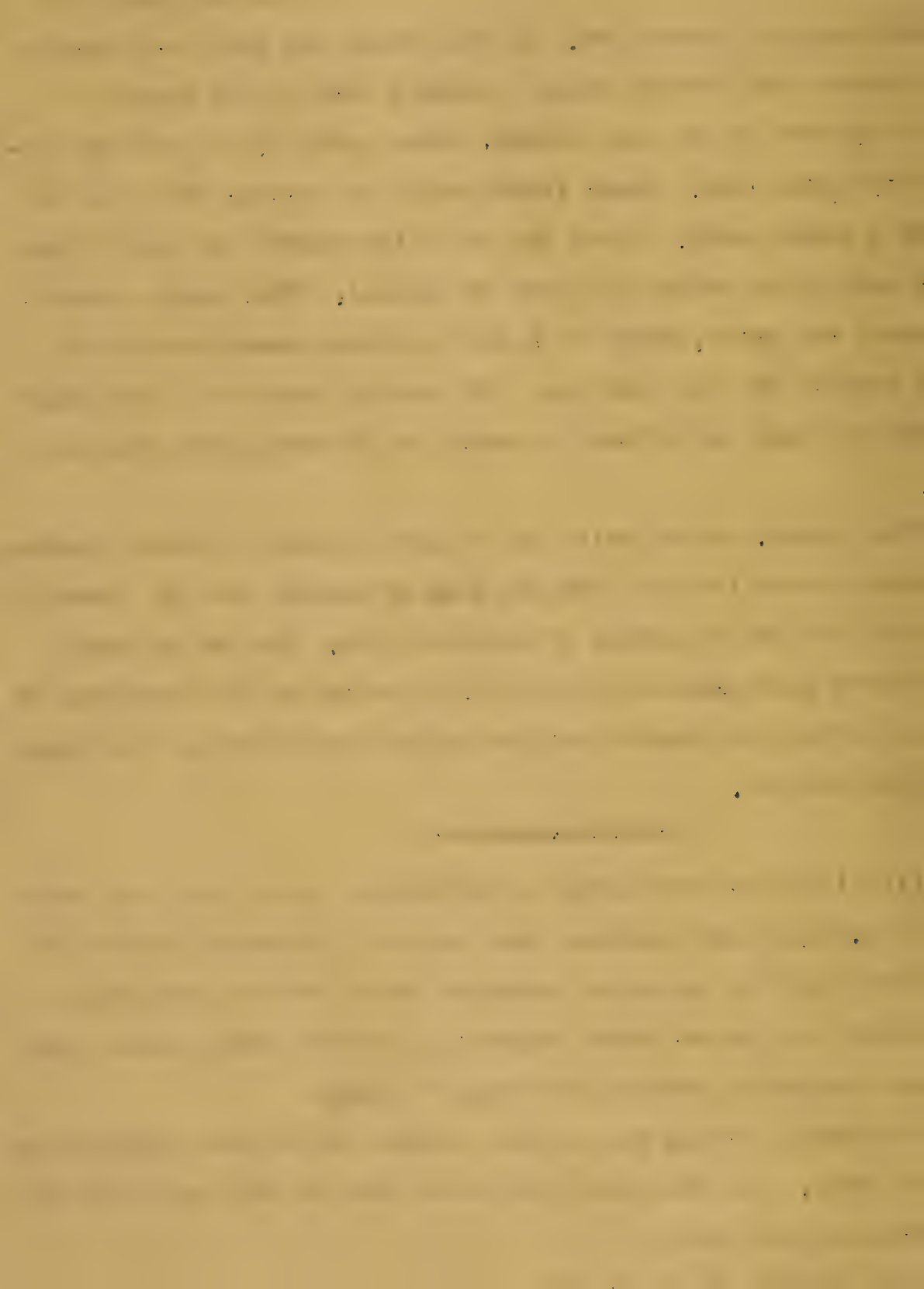
Masonry silos that show etching of the inside walls, due to the action of silage acids, or silos with defective mortar joints require a more complete repair job. If the joints are bad, loose mortar should be cleaned out and all breaks repaired with a good mason's mortar or a mixture of one part cement, three parts clean sand and one-tenth part hydrated lime. Rough inside walls of masonry silos can be improved by a cement wash. Clean the walls thoroughly and dampen them for two or more hours before the wash is applied. Then apply a brush coat of cement and water, mixed to a good painting consistency so it will apply readily but will not run. The coating should be kept moist for at least two days and allowed to cure for 10 days before the silo is filled.

Very rough, etched walls may require a coat of cement plaster. A good plaster mortar is made with one sack of cement, two and one-half cubic feet of sand and 10 pounds of hydrated lime. One or two coats about one-fourth inch thick will be used, depending on the condition of the surface. After the plaster has been cured for 48 hours, the cement wash should be applied.

(1:00) Winter cover crops on cultivated fields help the farmer check soil washing and leaching, and build up the organic matter in his soil. But they have an extra advantage under present conditions. With feed short, the winter cover crops will provide early pasture next spring before permanent pastures are ready to graze.

Of course, grazing may reduce somewhat the soil-building value of the cover crops. But the livestock return much of the fertility value of the crops to the land.

Crop specialists of the University of Illinois College of Agriculture and the U. S. Department of Agriculture point out that



nonlegumes such as wheat, rye, barley and rye grass grow rapidly and come along for late fall or early spring.

Remember a good winter cover crop of small grains will come in mighty well as pasture early next spring when feed stocks begin to run low.

(1:30) More people than ever this year are planning to save dry beans they have grown in their gardens---navy beans, lima beans, kidney beans and string beans. Now according to H. B. Petty, extension entomologist of the University of Illinois College of Agriculture and State Natural History Survey, care should be taken to avoid an infestation of bean weevil from developing. The eggs of this weevil are many times laid in the beans while they are in the field, and the dry beans carry this infestation right into winter quarters.

These weevils and their young are pests that feed in the bean, hollow out the center, and then eat their way out of the bean, leaving a small round hole in the pod. Naturally, this makes the beans unfit to eat. Several generations of this weevil occur during the winter months and it isn't very long until all the beans are eaten. Now, of course, this is no time to let insects eat some of the food we've saved for this winter. This damage can be prevented.

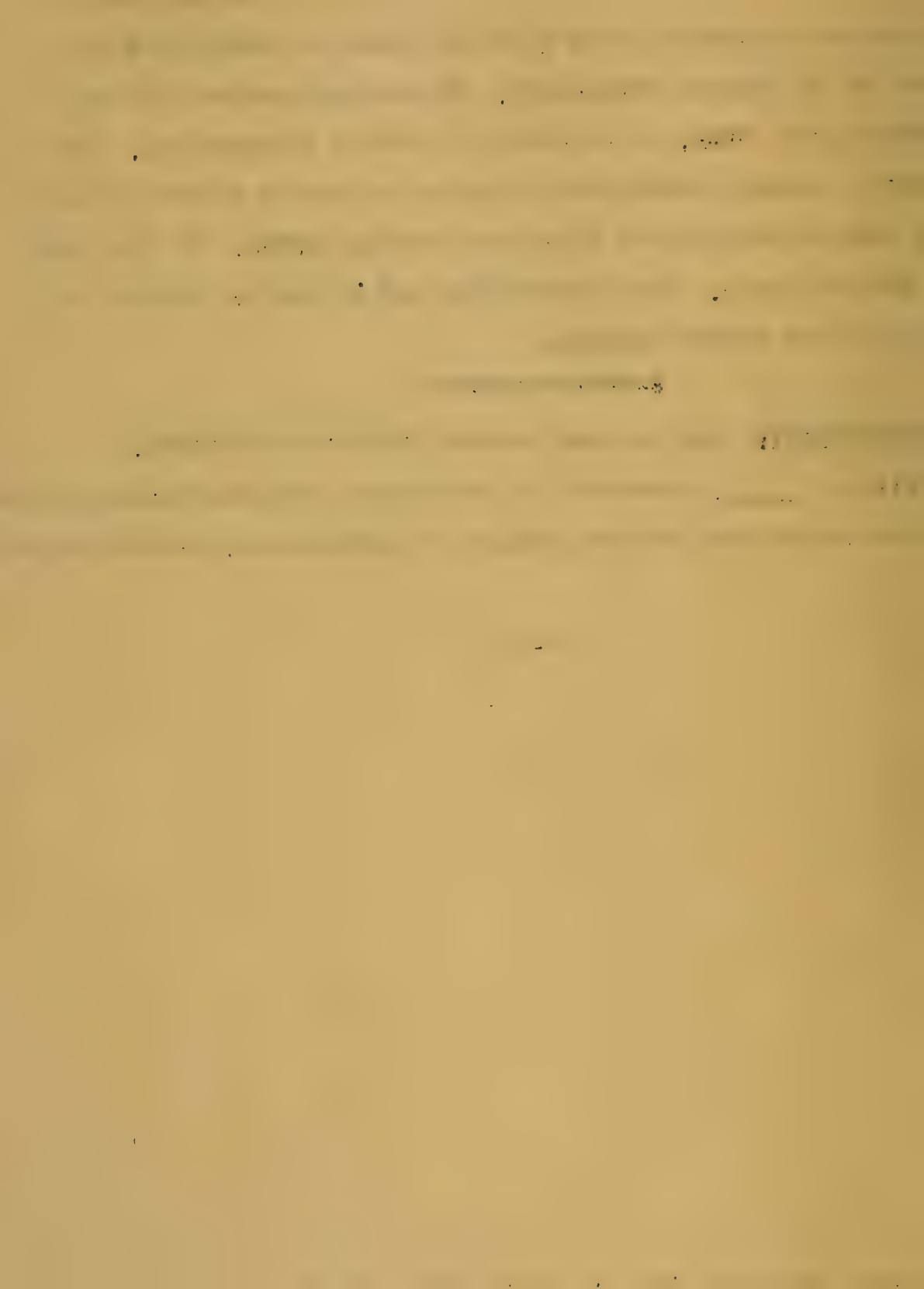
Here's how. Place those beans in an airtight container.

Let's say a gallon tin can and the beans fill the can three-fourths of the way. Then place a small piece of cloth or cotton on top of the beans, pour one-half to one teaspoonful of carbon bisulfide onto the cloth and immediately fasten the lid on tightly so the container is airtight. Forty-eight hours later, remove the beans and store them in a tightly woven sack. One caution about using carbon bisulfide: It's highly inflammable and all work with this material should be done where

there is no danger of fire developing. However, this treatment is the best we know for the control of this insect as all forms are killed.

Another treatment is to heat the beans for four hours at a temperature of 135 degrees Fahrenheit. If the temperature gets too high the beans will **char**, so an accurate control is necessary. Dry beans should be checked occasionally during the winter to see if the beans have been infested again from some outside source. If so, they should be treated again. More information may be had by writing for the leaflet on bean weevil control.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.



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Cop. 2

SIXTY-NINTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture

Speaking time: 4:15 minutes

THE LIBRARY OF AGRICULTURE
August 30, 1943

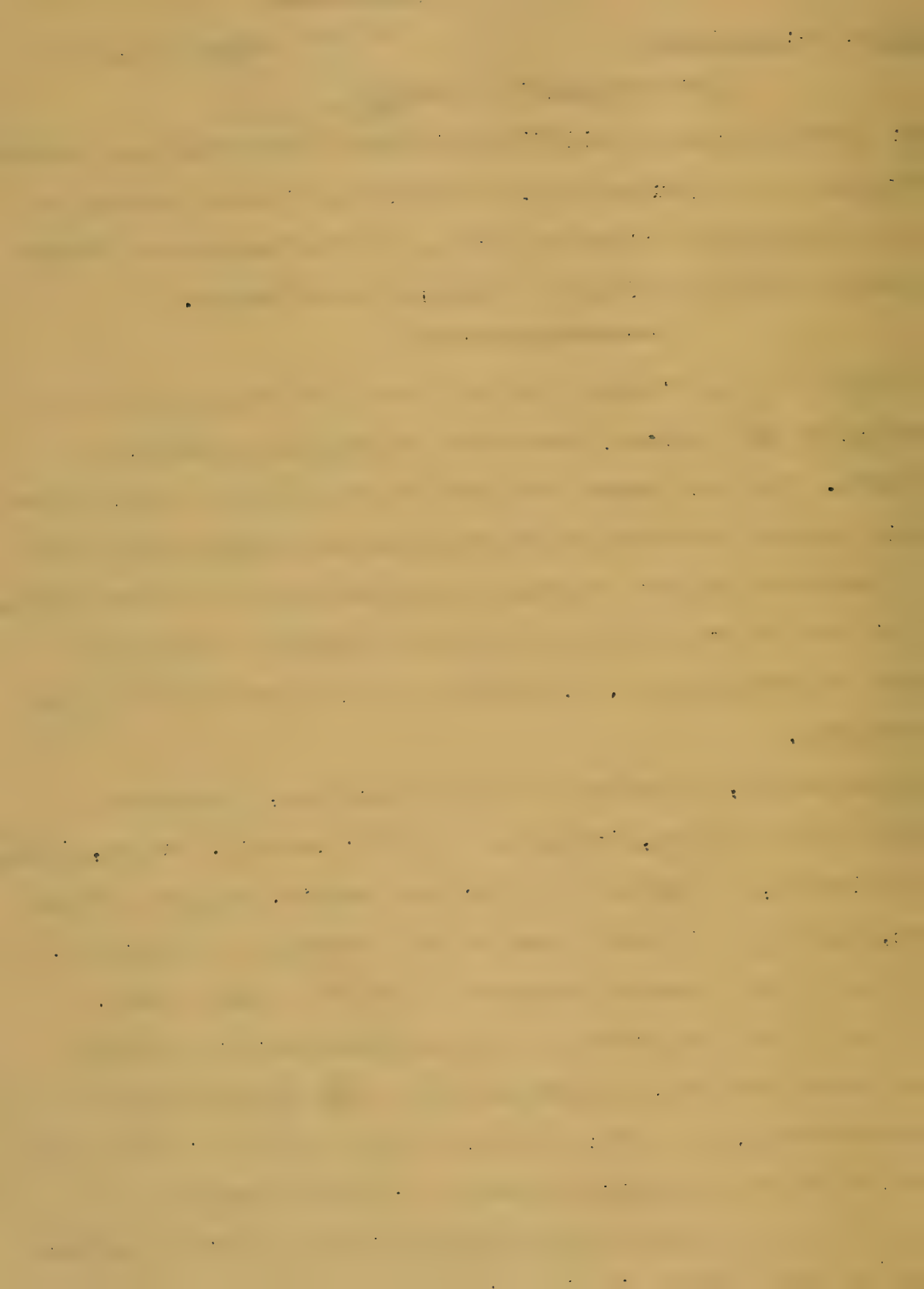
(FOR BROADCAST USE ONLY)

SEP 20 1943
UNIVERSITY OF ILLINOIS

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(3:00) I'd like to give you the dates for seeding wheat in Illinois which, on the average, have given the highest yield over a period of years. The main reason for this is that Hessian fly is capable of causing severe reduction in wheat yields and seeding after the date of fly emergence helps to control the infestation. In other words, Hessian fly is one insect we can fight with a calendar, and here is that calendar as outlined by C. C. Compton of the Illinois State Natural History Survey.

Boone county, September 17 to 19; Winnebago, Stephenson, Lake, McHenry and Jo Daviess, September 17 to 20; Carroll, DuPage, Ogle, Lee, Kane and DeKalb, September 19 to 21; Cook county, September 19 to 22; La Salle, September 19 to 24; Rock Island, Whiteside and Kendall, September 20 to 22; Will county, September 21 to 22; Henry county, September 21 to 23; Bureau county, 21 to 24, Grundy county 22 to 24; Kankakee and Mercer counties, 22 to 25; Livingston and Stark, September 23 to 25; Marshall-Putnam, 23 to 26; Knox and Warren, 23 to 27; Peoria and Henderson, 23 to 28; Ford county, September 23 to 29; Iroquois, 24 to 29; Woodford, 26 to 28; Fulton and Hancock, September 27 to 30; McLean and Tazewell, September 27 to October 1; Vermilion, September 28 to October 2; DeWitt, McDonough, Mason and Schuyler, September 29 to



October 1; September 29 to October 2, Champaign and Piatt counties; and September 29 to October 3, Logan county; September 30 to October 2, Brown, Menard and Cass, and Adams county, September 30 to October 3.

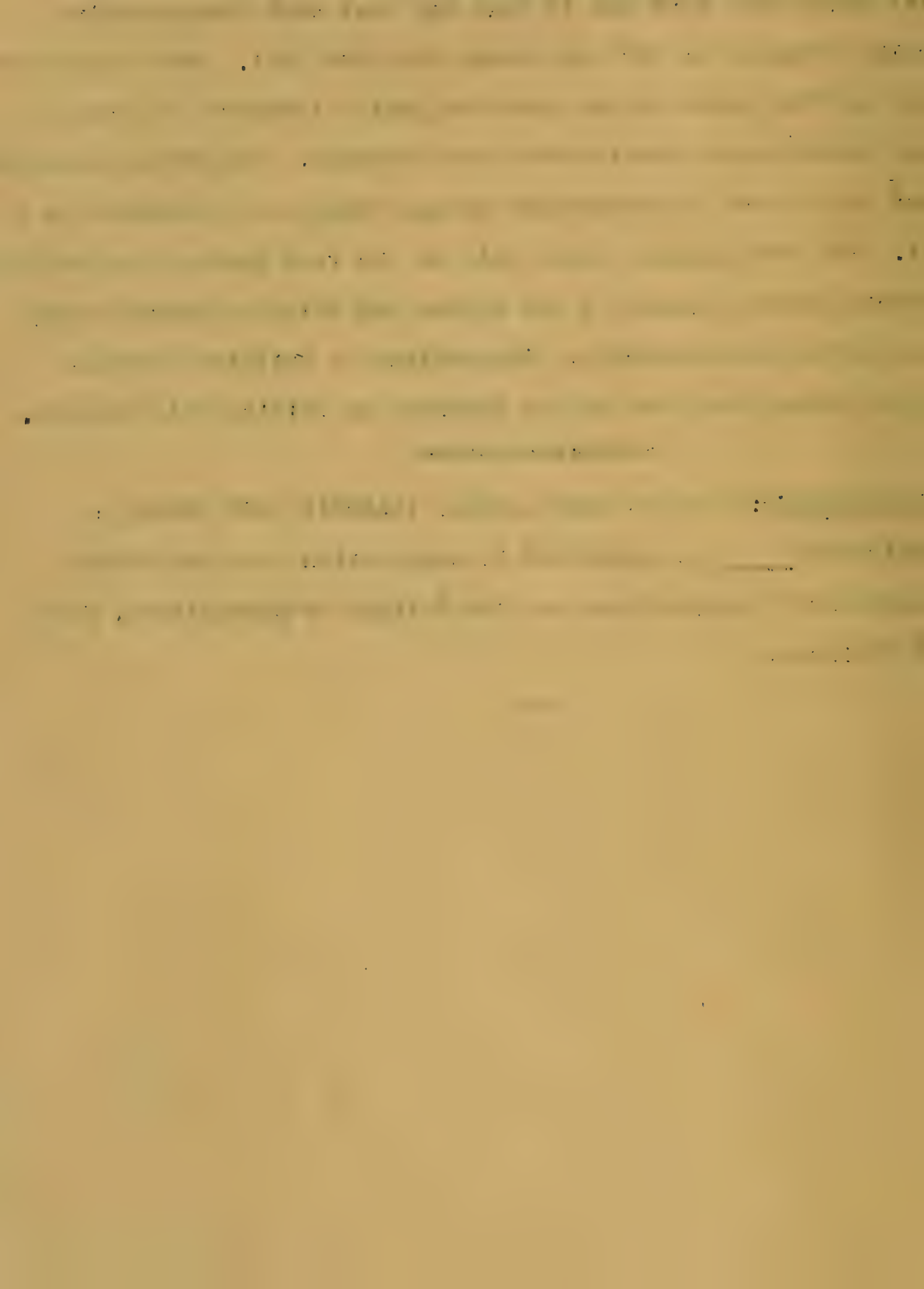
Now there you have the Hessian fly free dates for the seeding of wheat in Illinois counties, which, as a general rule, have been in the northern and north central parts of the state. The dates, of course, have included September. However, as we move farther down state, we find the wheat seeding dates are for October only. So let's continue the list. Macon county, October 1 to 3; October 1 to 5, Sangamon; October 2 to 4, Christian, Edgar, Pike, Morgan, Moultrie and Scott; Douglas county, October 2 to 3, and Coles and Shelby, October 3 to 5; October 4 to 5, Cumberland; 4 to 6, Clark; 4 to 7, Greene, Montgomery and Macoupin; October 4 to 8, Calhoun; 5 to 8, Effingham and Fayette; 6 to 8, Crawford, Jasper and Jersey; October 7 to 9, Bond and Madison; 7 to 10, Clay; October 8 to 10, Clinton, Richland, Lawrence and Marion counties; 9 to 10, Edwards, and for October 9 to 11---and here comes a whole string of counties for October 9 to 11---Jefferson, St. Clair, Wabash, Randolph, Monroe, Washington, Wayne and White, all for October 9 to 11. October 10 to 11, Hamilton and Perry; October 10 to 12, Johnson and Franklin; October 11 to 12, Pope, Pulaski, Williamson, Gallatin, Saline, Massac, Hardin, Union and Jackson, and Alexander, October 12.

There you have the fly free dates for Illinois. Now if you overlooked your county, I'd suggest you check with your farm adviser for the best time for seeding wheat in Illinois.

(1:00) Another way ingenious Illinois farmers are saving labor during haying is with the use of a baled hay elevator, according to R. C. Hay, agricultural engineer, University of Illinois College of

Agriculture. The purpose of these baled hay elevators, Hay explains, is to hoist bales into mows and in this way save much back-breaking labor usually required to lift the bales into the loft. Such elevators can be made up from parts of old portable grain elevators or from an old belt on which wooden cleats have been fastened. The whole assembly is then put in a frame and connected through some speed reduction to a power unit. The most popular power unit on the farm having electricity is an electric motor; however, a gas engine and friction drives using truck wheel works satisfactorily. Suggestions on building homemade baled hay and straw elevators can be obtained by writing this station.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.



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Cop. 2

SEVENTIETH

ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 4 1/2 minutes

THE LIBRARY OF THE September 2, 1943

(FOR BROADCAST USE ONLY) SEP 20 1943

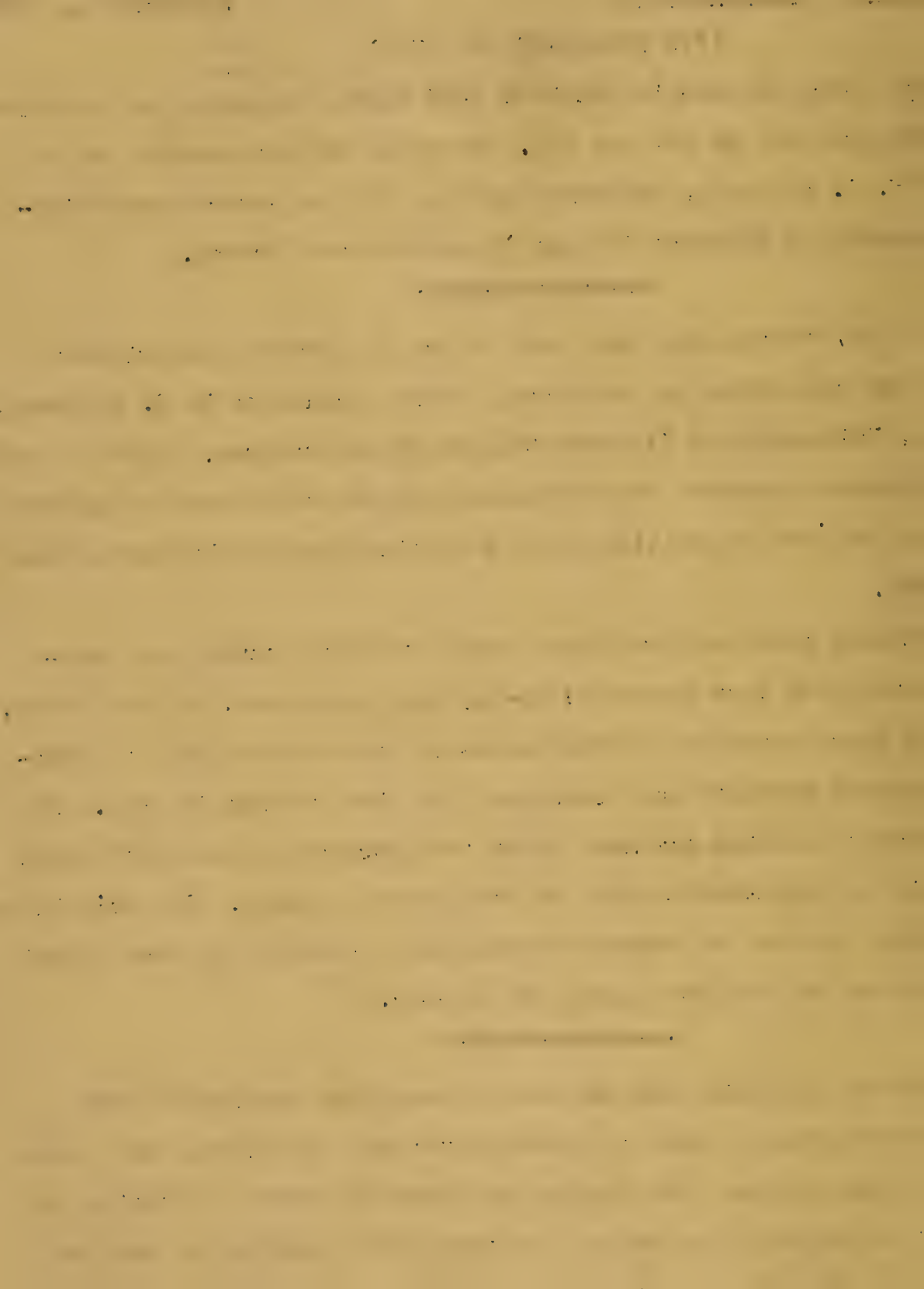
UNIVERSITY OF ILLINOIS

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(:40) "Waste not, want not" is an old proverb that victory gardeners can capitalize on right now, in the opinion of M. D. Appleman, agronomist, University of Illinois College of Agriculture. Most of you victory gardeners remember the fertilizer situation you were up against this spring and now is the time to do something about it by making your own for 1944.

Making your own fertilizer simply involves saving the vegetable residues from your garden clean-up, lawn clippings, fallen leaves, garbage and such; covering it with layers of dirt; sprinkling on a mixture of ammonium sulphate and limestone, and then wetting it down. Now I'm not going to mention any more about the procedure because it's told very well in leaflet AG1169, which is free for the asking. If you'd like a copy of this leaflet on homemade fertilizers, remember to drop a card to this station and ask for leaflet AG 1-1-6-9.

(1:00) Illinois farm advisers in southern counties of the state are saying that a lack of potash in the soil is causing more corn failures in many fields. The typical symptoms of potash starvation are short, bushy growth with the top of the corn leaves dark green and the lower leaves yellowish-green with brown scorched edges. Corn along dead furrows usually show the more severe symptoms of starvation. A



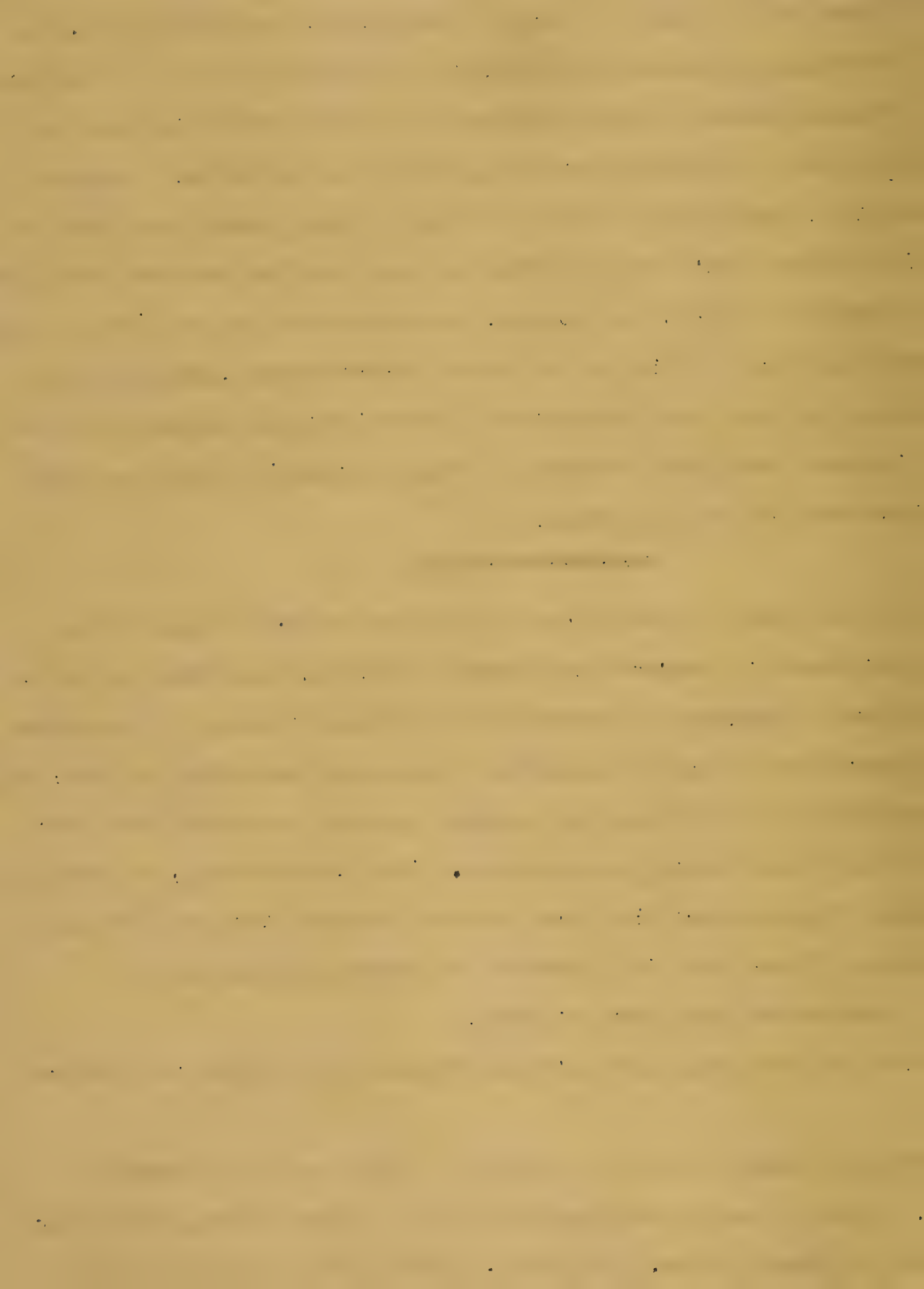
lack of potash is also causing low yields or failures of alfalfa and clover on many fields that have not been limed and phosphated.

There is no need to test these soils, according to C. M. Linsley, extension agronomist, University of Illinois College of Agriculture. Fields showing severe symptoms of potash starvation need a potash fertilizer, especially for corn, clover and alfalfa. Farmers should insist on muriate of potash or a high potash fertilizer, such as 0-9-27. Soils that don't show starvation symptoms but are suspected of being low should be tested for potash. Arrangements are now being made at the University for setting up a potash soil-testing laboratory for testing soils for available potassium. Directions for collecting samples will be made available through the farm adviser's office as soon as the laboratory starts operation.

(1:20) Now is a good time of the year to make preparations for grass waterways to control and prevent gullies, according to R. C. Hay, agricultural engineer, University of Illinois College of Agriculture. The most simple way to establish waterways, according to Hay, is to leave a wide strip of grass and legumes through the ditch and well up on each bank when plowing up a meadow. This can be done, of course, only on those fields where the ditch is well sodded over and not too deep to cross. Therefore, it's easier to prevent gullies than to control them after they have started.

For gullies that have already formed, five steps are recommended.

First, shape a uniform waterway as wide and as straight as practical. Plow in low places and work down to form a wide, flat channel that can be mowed later. Use disc, harrow and corrugated roller to form firm seedbed for the channel. Grass channels should be at least a



rod wide, usually wider, up to 40 or 50 feet. If practical, make the waterway so wide that flood water will stay on the sod.

Next, apply 8 to 10 tons of manure an acre and work into the seedbed. Fertility is essential.

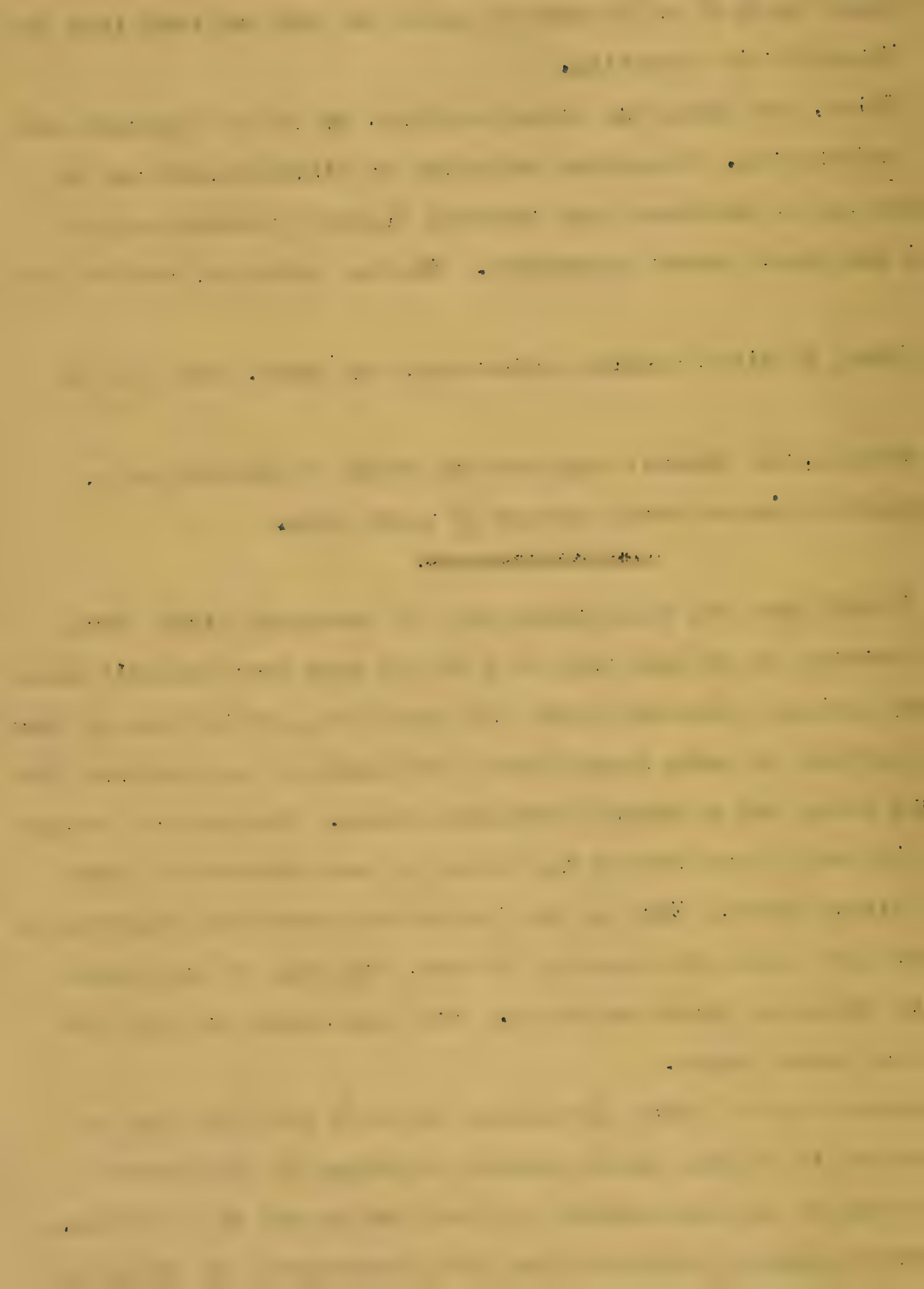
Third, use twice the normal seeding, or 10 to 15 pounds each of redtop and timothy. Bluegrass and white or alsike clover may be added. Seed can be broadcast and harrowed lightly or seeded with a disc drill and grass seeder attachment. Scatter plenty of seed on the banks.

Then, if first seeding washes out, try again next fall or spring.

Finally, mow channel regularly in order to control weeds. Make a productive meadow strip instead of waste land.

(1:30) Have you been losing pigs at farrowing time? Have they been farrowed at or near full term but so weak they couldn't nurse or have they perhaps been born dead? If they have, and if some of them have been hairless or their hoofs poorly developed, it is possible that the sows are being fed an iodine-deficient ration. Evidence of iodine deficiency in newly born litters has recently been observed in four separate Illinois herds. Most of the iodine-deficient pigs reported in other states have occurred in spring litters, the bulk of the losses appearing in February, March and April. Fall and summer litters are affected to a lesser degree.

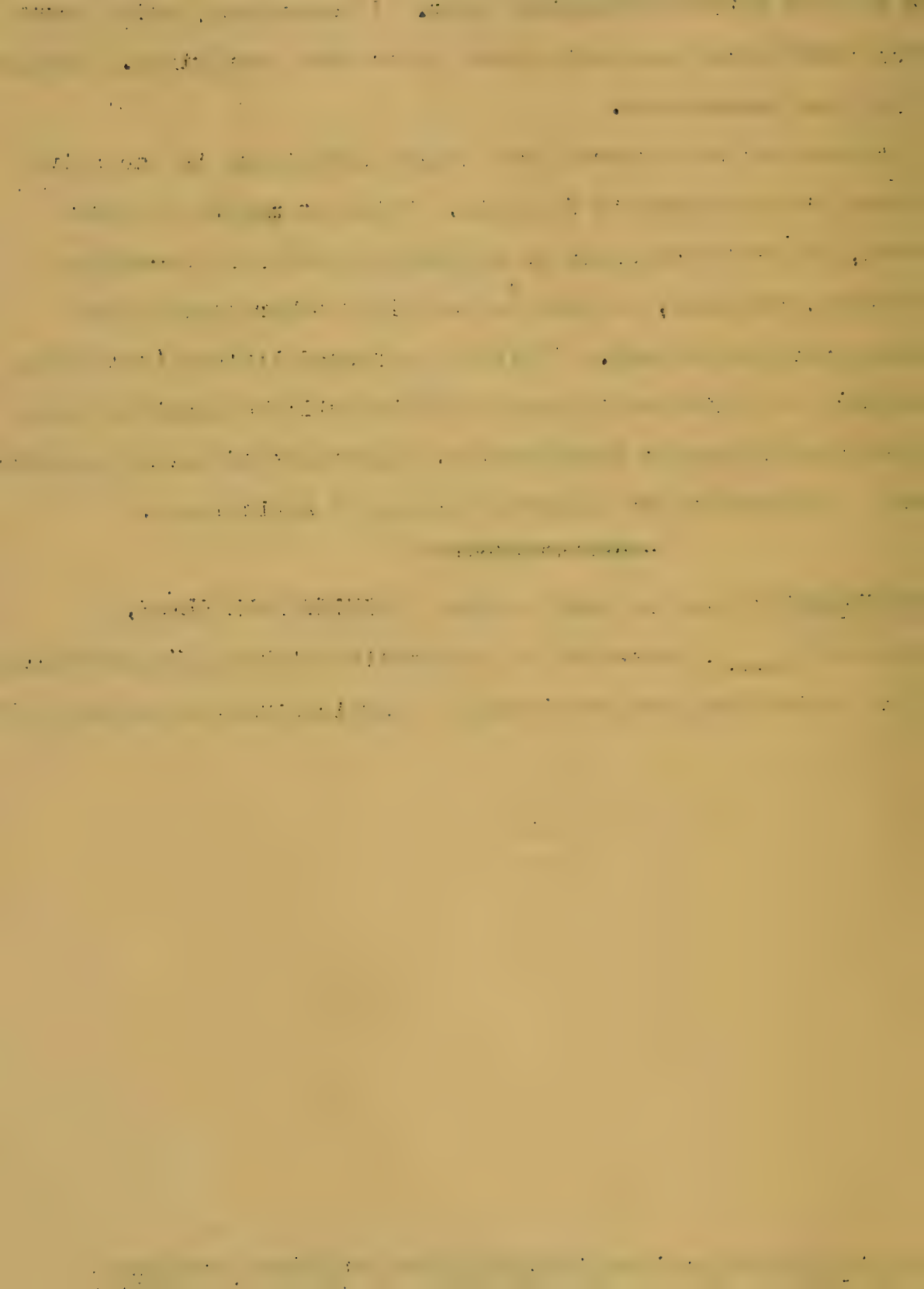
Losses due to iodine deficiency in newly born pigs may be easily prevented by feeding small amounts of iodine in the form of potassium iodide to the sows during the last two months of pregnancy. Veterinarians frequently prescribe one level teaspoonful of potassium iodide for 50 sows once a week. One gram, or approximately one-fifth



of a teaspoonful, weekly is sufficient for ten sows. Mixing the potassium iodide in the water or feed each week saves labor and insures the intake of this goiter-preventive agent. In emergency, this amount can be given every other day until three doses have been given. Weekly treatment is then recommended.

It must not be inferred that iodine deficiency is the only cause of young pig mortality in Illinois. While it may be a factor in some herds, other factors, such as contagious abortion, so-called baby pig disease, chilling, as well as sequels of other diseases of pregnant sows, may play a part. Typically affected litters (stillborn at full period) if delivered in good condition will be examined without charge at the diagnostic laboratories, department of animal pathology and hygiene, University of Illinois College of Agriculture.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.



1261
Cop. 2
SEVENTY-FIRST
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture

THE LIBRARY OF THE

Speaking time: 3 1/4 minutes

SEP 20 1943 September 6, 1943

(FOR BROADCAST USE ONLY) UNIVERSITY OF ILLINOIS

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:30) Here is a report we hope will take the hide off--
carefully.

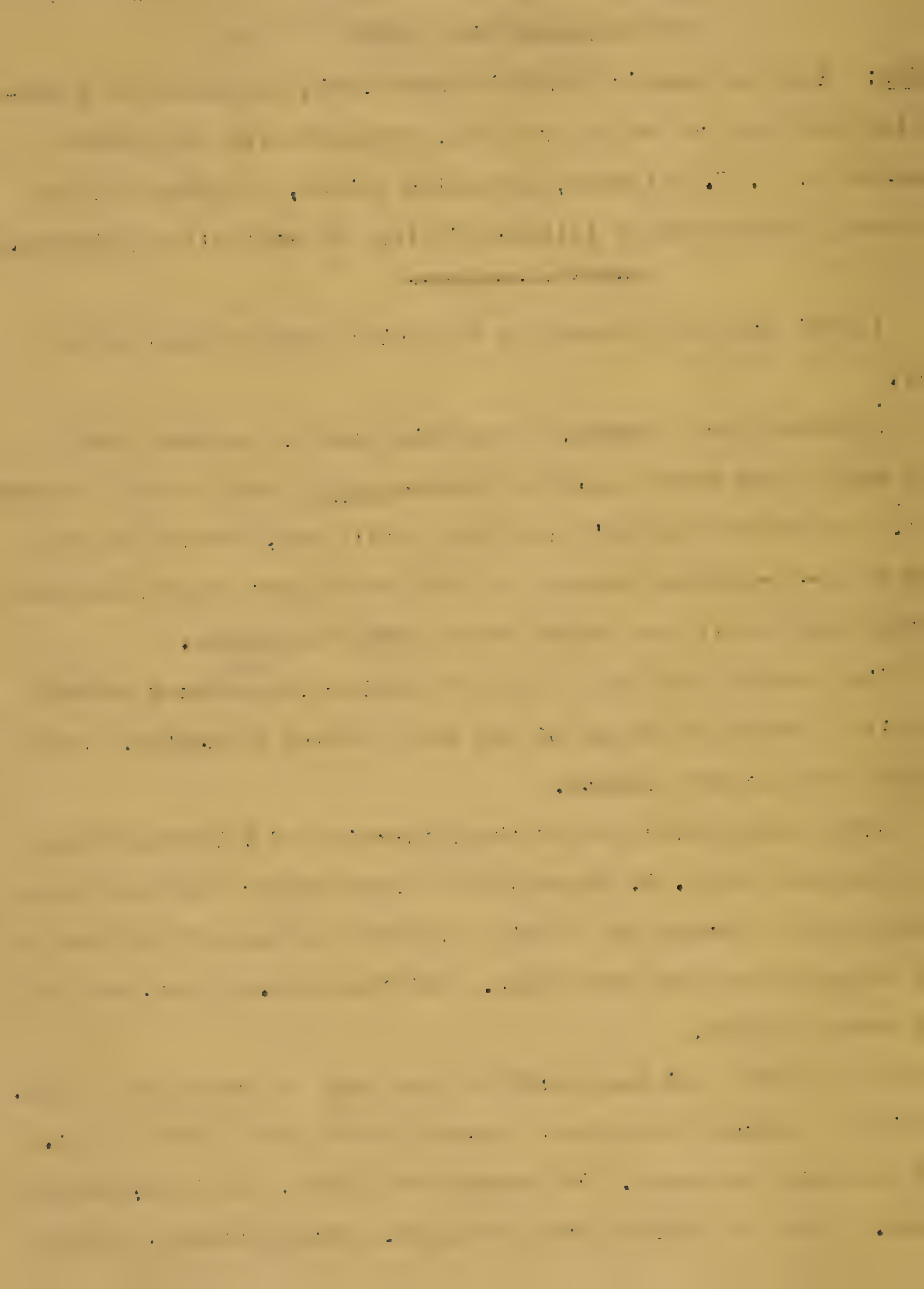
Consider for a moment, a nice big slab of leather from a hide that would have made a pair of shoes--except that it had a groove across it. The groove wouldn't look very well, say, across the toe of a pair of go-to-meeting shoes. Neither would work shoes made from that leather wear well; they might crack along the groove.

The trouble with that piece of leather is ^{that} somebody scored the hide with a careless stroke of his knife during slaughter. And this botched hide is not unusual.

Livestock specialists of the University of Illinois College of Agriculture and the U. S. Department of Agriculture say that careless butchering and taking off of hides causes the loss of millions of pounds of valuable leather every year. But this year of war, we can't afford to waste leather.

So the livestock men plead for more care in taking off hides.

Use a skinning knife with rounded blade and a blunt point. Make sure the knife is sharp. In taking off a hide, use long, sweeping strokes. Make the opening cuts straight. Avoid crooked, ragged edges.



After the hide is off, cut off all the fat and meat, and immediately put clean salt on the hide to prevent spoilage.

Those are just a few hints on taking off a hide. For further tips on getting the hide off in good shape get in touch with your county farm adviser or write this station. We'll be glad to help you do your share in saving hides for leather for the men on the march.

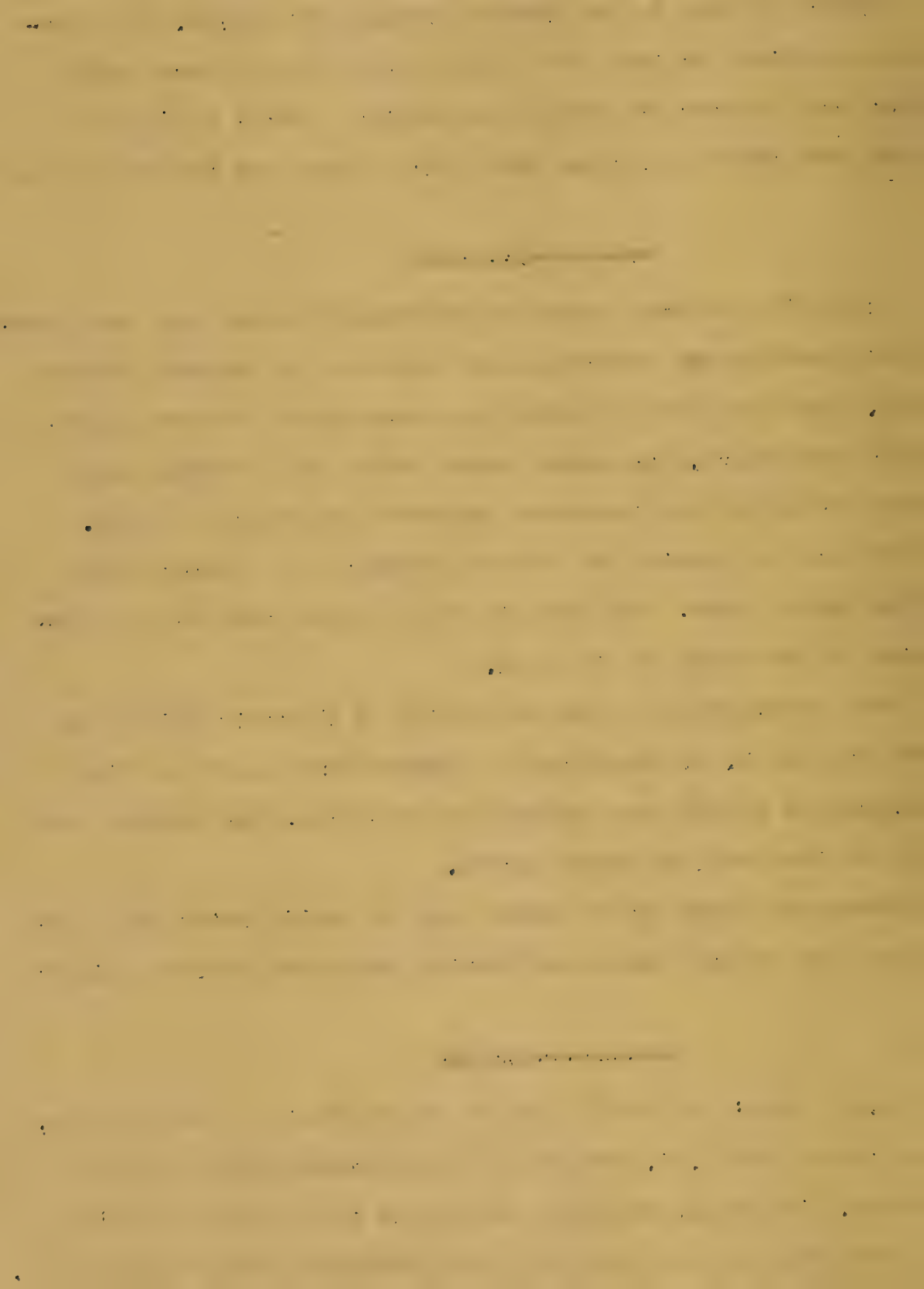
(:45) Winter cover crops on cultivated fields help the farmer check soil washing and leaching, and build up the organic matter in his soil. But they have an extra advantage under present conditions. With feed short, the winter cover crops will provide early pasture next spring before permanent pastures are ready to graze.

Of course, grazing may reduce somewhat the soil-building value of the cover crops. But the livestock return much of the fertility value of the crops to the land.

Crop specialists of the University of Illinois College of Agriculture and the U. S. Department of Agriculture point out that nonlegumes, such as wheat, rye, barley and rye-grass, grow rapidly and come along for late fall or early spring.

Remember, a good winter cover crop of small grains will come in mighty well as pasture early next spring when feed stocks begin to run low.

(1:00) Here's a little note on the control of fall webworm, which comes to us from C. C. Compton of the Illinois State Natural History Survey. You know, the fall webworm is the creature that's decorating the trees in our yard in a most unsightly manner these days. Sometimes just a leaf or two may be webbed within their protective



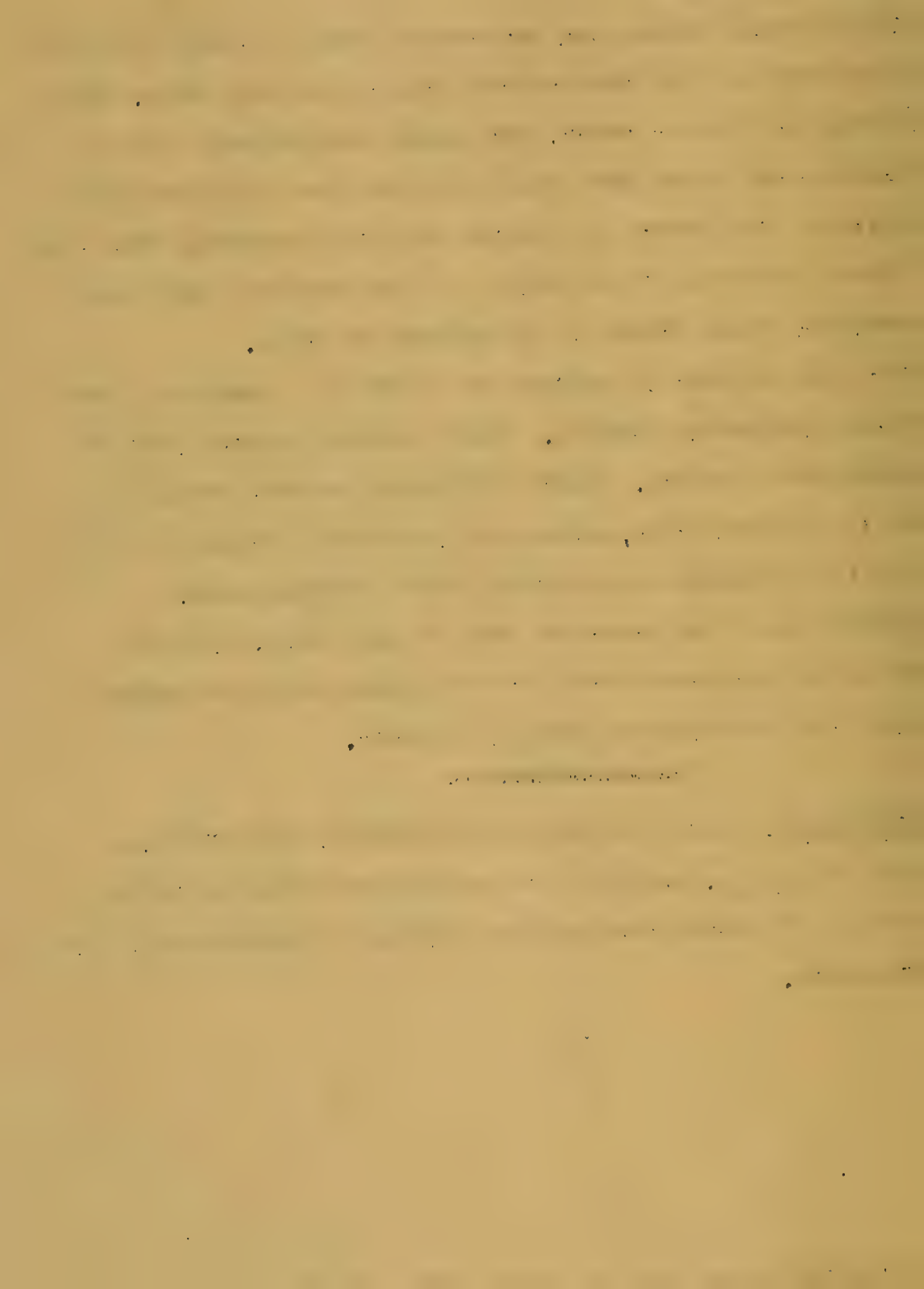
tent, but other times they'll enclose a whole branch of considerable size.

Now on small trees, you can remove these webs and worms by hand. You may even cut off the infested branch and burn them. Many people burn them out with a torch, but unless considerable care is taken the burning may cause more damage to the trees than the webworms themselves. The insect is readily killed by spraying with lead arsenate. Use a solution of two pounds of lead arsenate and eight ounces of ordinary wheat flour to 50 gallons of water.

The fall webworm is subject to attack by a number of parasites and other predaceous enemies. These natural enemies hold the insect in check most seasons. Where the insect becomes unusually abundant, as it has this year, parasites are almost certain to reduce their numbers to negligible proportions before another year.

Compton adds that webworms come so late that, with the exception of recently planted trees or very young fruit and shade trees, little or no permanent injury will result.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.



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SEVENTY-SECOND
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 5½ minutes

September 9, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:00) Livestock shippers are urged to place orders for cars with railroad agents in advance of the time they expect to load their livestock for market. Such a procedure will be a help to railroads and a protection to shippers, since it will enable the carriers to distribute the available equipment to loading stations on the basis of actual requirements. The livestock trucking situation is likely to be tighter than it was a year ago, which causes some concern over the railroads' ability to supply the demand for single-deck and double-deck cars during the peak movement of livestock in 1943. Many shippers in former years delivered their livestock to the loading pens without advance notice to the railroads regarding their requirements. However, the same procedure cannot be followed this year if railroads are to provide the services expected of them by livestock shippers. With livestock production in this country at a very high level, both transportation and processing facilities will be strained to the limit in an effort to take care of the situation. We can do our part to relieve the situation by ordering our livestock cars in advance of the time we need them.

(:45) Haphazard fuse replacements have always been one way of asking for trouble. But now, under wartime conditions, farm

electrification specialists of the University of Illinois College of Agriculture and U. S. Department of Agriculture point out this practice is doubly unsafe.

No farmer today would chance putting a penny behind a burned out fuse. It's a sure way to invite a fire or damage to vital food production equipment.

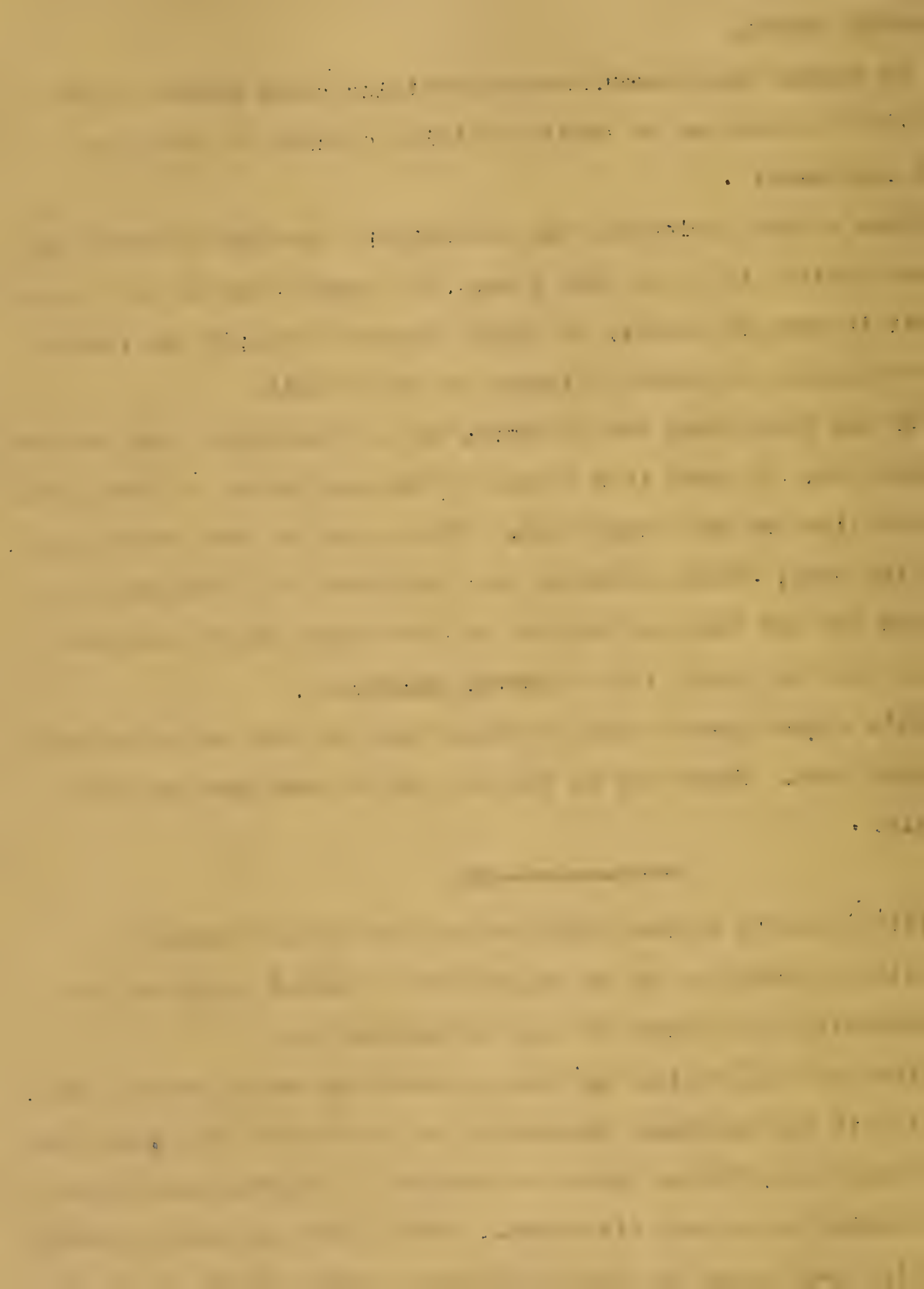
When a fuse blows out, the specialists say try to remove the cause before putting in a new fuse plug. The trouble may be in a piece of equipment in need of repair, in faulty wiring or simply the result of trying to operate too much equipment on one circuit.

If the fuse burns out at night, use a flashlight when you install the new one. Be sure it's a fuse of the same size. A large fuse overloads the line and may cause fire. First open the main switch before beginning work. Then, standing on a dry floor or a dry piece of wood, unscrew the old fuse and replace it with a new one of the same rating. Use just one hand, it's a **safety practice**.

It's a good idea to keep several fuses on hand where you can readily locate them. Never try to fix up a burned out fuse so it can be used again.

(1:00) Here's a five-point program for the prevention of swine enteritis as outlined by the department of animal pathology and hygiene, University of Illinois College of Agriculture.

First of all, follow the McLean county system of swine sanitation. While it was developed primarily for the control of roundworms twenty-five years ago, it has proved successful in limiting infectious conditions causing intestinal disorders. You'll find the McLean county system of swine sanitation outlined in Illinois circular 306, entitled "Cheaper and More Profitable Pork through Swine Sanitation." A copy is free for the asking. Address your request to this station.



Point number two in the program on the prevention of swine enteritis is to supply the right amounts and proportions of all elements known to be needed in the ration. With the feed situation tightening up, however, this may be a little more difficult to do right now. It is also advisable to avoid overfeeding or "pressing" which strains the digestive functions.

Next, avoid overcrowding facilities--you're inviting trouble that way even though you "may get by."

Follow a plan of regular vaccination against hog cholera.

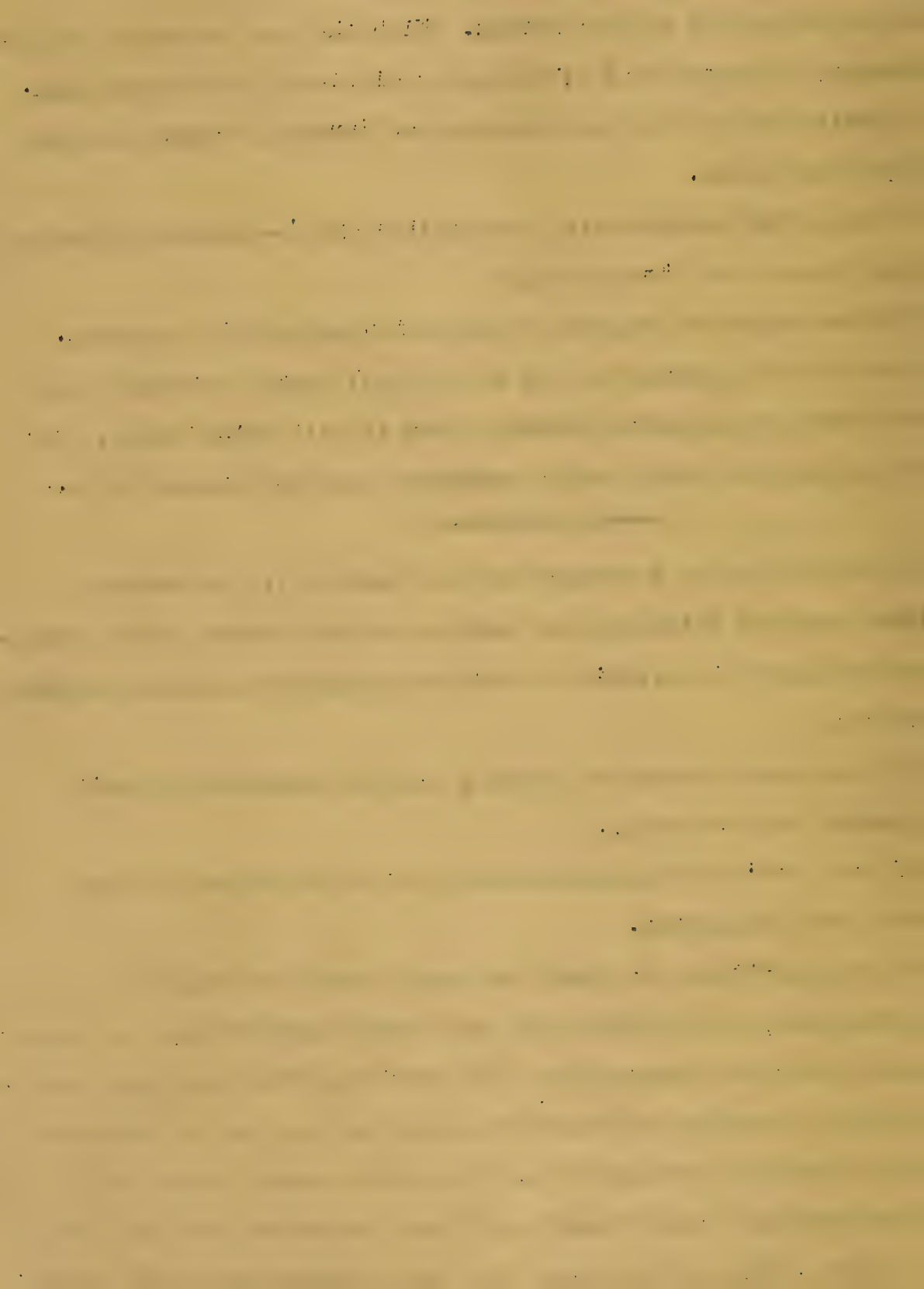
Last of all, quarantine or isolate all newly purchased pigs for at least three weeks before turning them in with other stock, regardless of how healthy these newly purchased pigs may appear to be.

(1:00) If you're a farmer and have sold a little dressed meat in times past and think you may want to in the future, you've probably wondered if there is anything in the new slaughter licensing system that affects you.

If you have a slaughter permit, the new regulations don't change the amount you can sell.

If you don't have a permit, then you can establish a quota based on your 1941 slaughter.

If you don't have a permit and can't establish your 1941 slaughter, food distribution officials say your slaughter must be limited to slaughter for home consumption. If your slaughter for home consumption provides a surplus you need to sell, then you go to your war board and tell them the circumstances. They will expect you to tell them about how much meat your family will use, and about how much meat you may have left. The war board may give you a quota that will permit you to sell the leftover meat. But the war board isn't allowed to give



you an unlimited quota--the amount of the leftover meat the war board can give you permission to sell is limited to 400 pounds of dressed meat.

The provisions of the present slaughter license regulations are designed to save meat that might go to waste--they aren't framed to allow anyone to go into the meat selling business who hasn't been in it before.

(:45) Sloping cropland subject to erosion can advantageously be terraced this fall if it is to be plowed, according to R. C. Hay, agricultural engineer, University of Illinois College of Agriculture. When well-sodded terrace outlets or grass waterways have been established in a field, terraces to check erosion losses can be constructed at the same time, Hay states. Field trials show that terraces can be satisfactorily built on slopes up to six or eight per cent with the tractor and moldboard plow, instead of more complicated grading machinery. Well-constructed terraces on sloping cropland will be subject to far less erosion than previously experienced. By the use of terracing and contour farming, some sloping fields can be so well protected from erosion that they can be used in rotation with more level land on the same farm, whereas without the terracing, they might eventually become so eroded that they could be used only for pasture or meadow. If terracing is to be done, certain precautions should be followed. Terraces should be carefully staked out, according to recommended specifications. Terrace outlets should be well sodded, and the operator should plan to farm the land on the contour after the terraces are built.

(1:00) Farmers are raising more chickens this year. More, in fact, than ever before in the history of the country.

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From reports collected by rural mail carriers from 165,000 farms and from other information, agricultural economists estimate farmers will raise more than 925 million young chickens in 1943.

That's millions more chickens than you could actually count in a month of Sundays. Just by way of comparison, you remember the economists said last year we had an all-time high record number of chickens. Well, this year, we have 16 per cent more than last year, and 36 per cent more than the average for the ten years before last year.

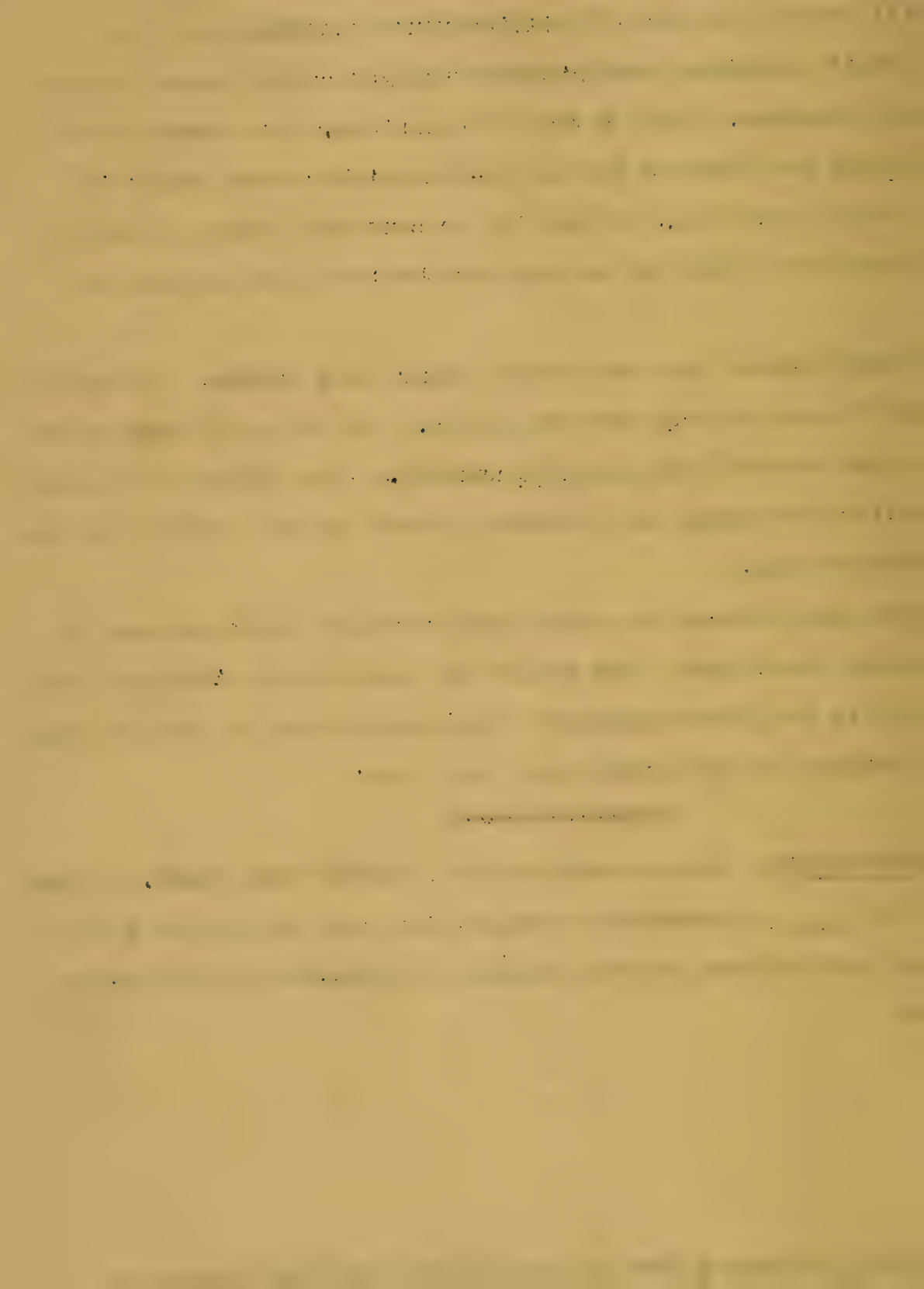
More farmers than ever bought their baby chicks. The hatcheries couldn't even keep up with the orders. In fact, the main hatching season just closing has been most unusual. Many hatcheries opened a month earlier than usual and operated a month or two longer than the usual hatching season.

Now some farmers are cancelling unfilled orders because of the uncertainty about feed. But unless the feed supply situation gets worse than it is now, the economists figure hatchings the rest of this year will continue to run larger than last year.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914



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Cop 2

SEVENTY-THIRD
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 3 1/4 minutes

September 13, 1943
THE LIBRARY OF

(FOR BROADCAST USE ONLY)

SEP 21 1943
UNIVERSITY OF ILLINOIS

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

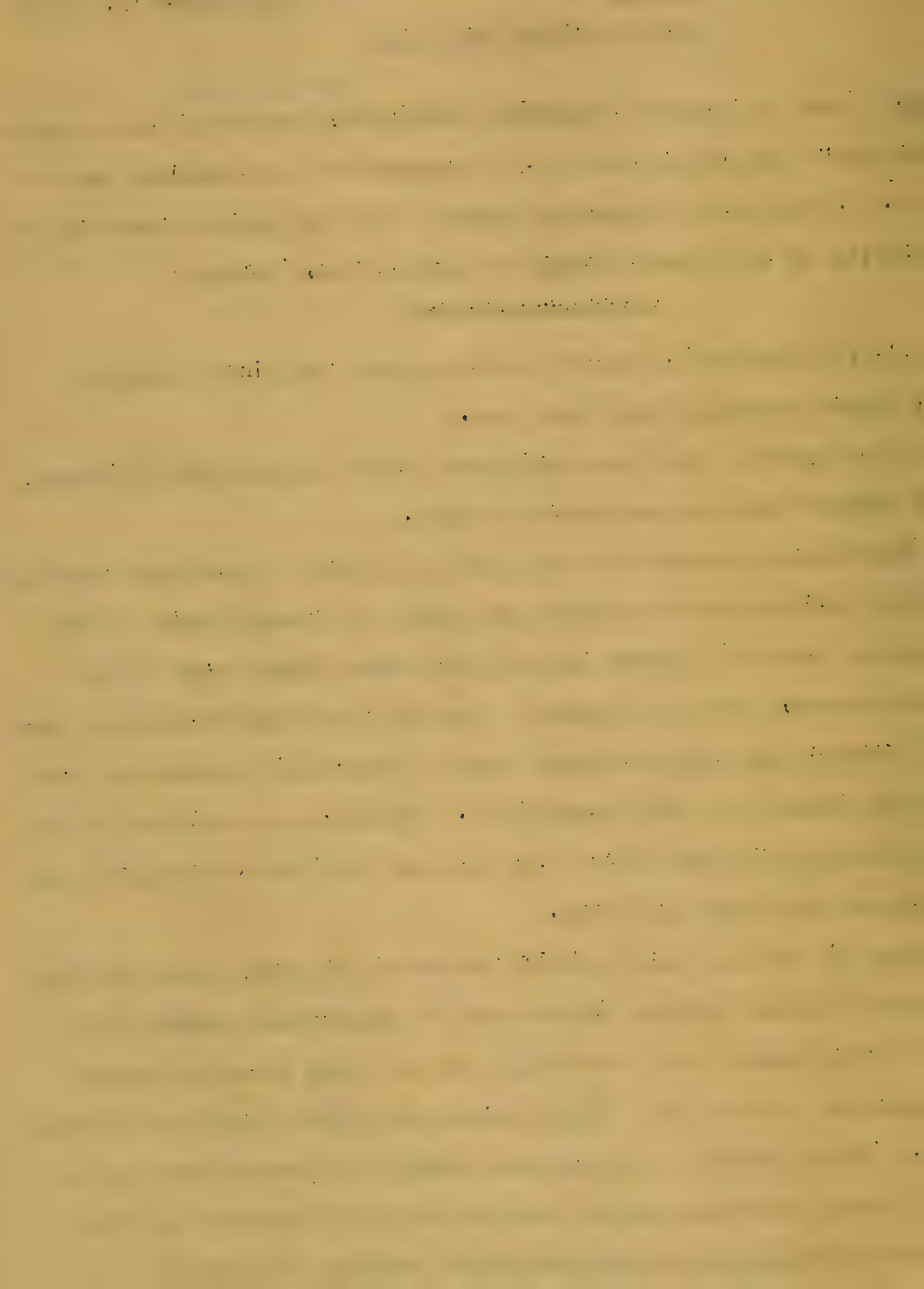
(1:15) This fall, sweet potato growers will have nearly a third more sweet potatoes than last year.

With lumber, labor and equipment short, production of boxes, crates and baskets may be down about a third.

That means growers and shippers will have a hard time getting enough wooden containers to harvest and place in storage their sweet potatoes during the fall months unless they start right away to buy second-hand baskets, crates or boxes. The War Food Administration suggests that growers and shippers have these second-hand containers delivered to the farm or to shipping points. Second-hand dealers in the cities are short of storage space and are not inclined to collect any more containers than they can store.

Even if farmers put in their orders right away, some of them may still have trouble getting either new or second-hand sweet potato containers of the usual type. But they can use many off-size crates and boxes such as lettuce and orange crates and apple boxes for picking and storage. They probably can get such crates and boxes from local merchants. These boxes and crates will serve until growers can buy usual crates and baskets to ship the sweet potatoes to market.

Sweet potato growers need to get busy right away--and line up every container they can--to handle this year's big crop.



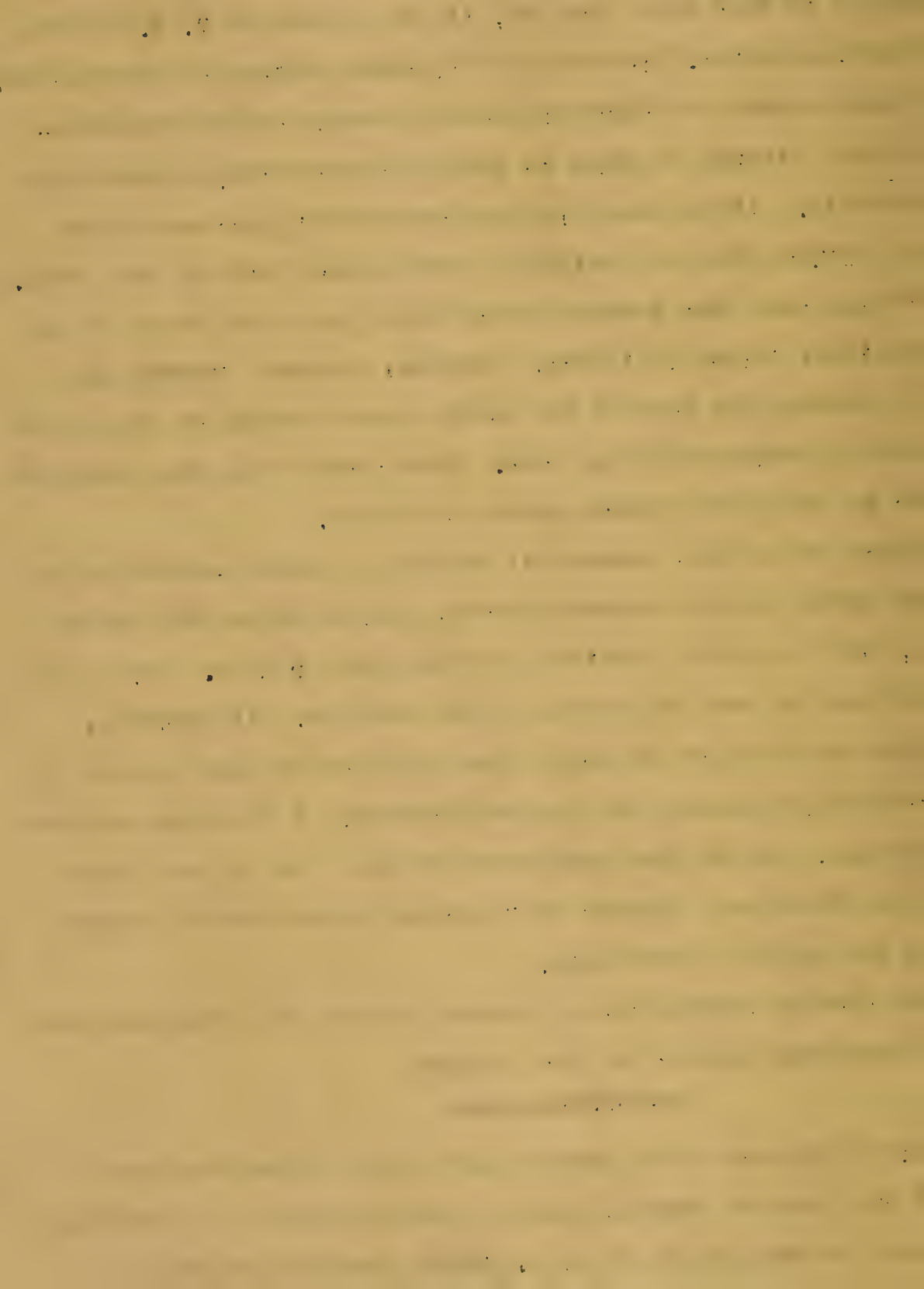
(1:00) You fellows who are finding it a little difficult to secure enough apple pickers for the 1943 harvest can use hormone sprays to an advantage in more ways than one, in the opinion of V. W. Kelley, extension horticulturist, University of Illinois College of Agriculture. You know, these hormone or "harvest sprays" prevent apples from dropping and delay picking in order to secure higher color, greater size and more maturity. At the same time you can stretch your available labor supply without fear of having all your apples fall off the trees.

Kelley says that hormone sprays have been found to be effective on Delicious, Golden Delicious, Jonathan, Stayman, Winesap and Duchess. Of course, the harvest has hardly begun for all of these with the exception of Duchess, which is over. Some growers say they have had good results by using the hormone sprays on Grimes.

There are several commercial brands of hormone sprays on the market. The spray usually becomes effective two or three days after application, and its effect persists for two weeks or more. The application should not be made too early, Kelley cautions. If possible, wait until the apples start to drop. The spray should also be made at the concentration recommended by the manufacturer. A thorough application is necessary, because the spray must wet the stems of the fruit in order to be effective. Harvest of Delicious should not be delayed so long that the apples become mealy.

For further information on hormone sprays, see your farm adviser or address your request to this station.

(1:00) Illinois fruit growers have never before been confronted with the problems they'll need to face this year in harvesting the apple crop, in the opinion of R. L. McMunn from the department of horticulture, University of Illinois College of Agriculture. He points

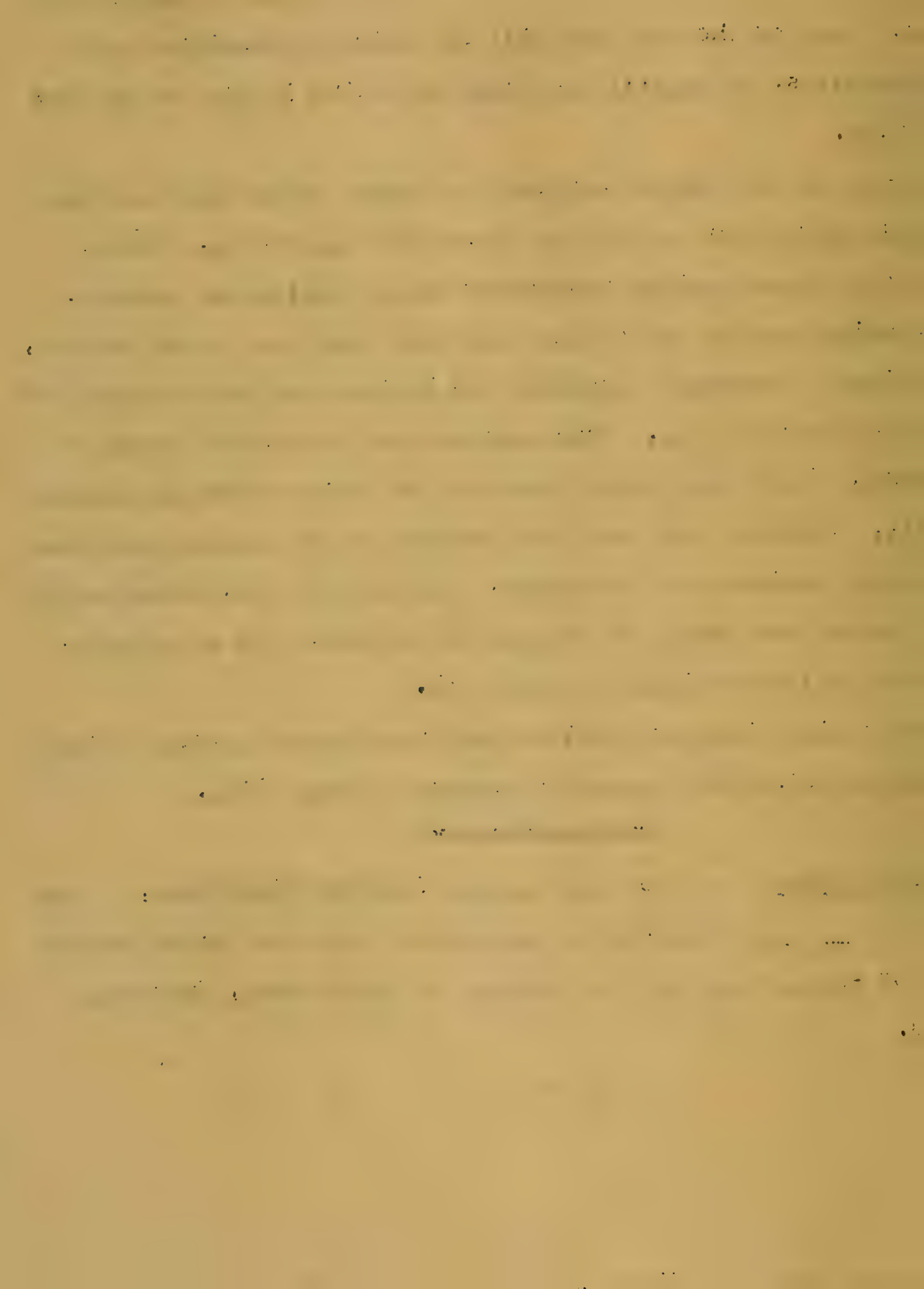


out that manpower shortage will be encountered and inexperienced help will have to be used. Older men and boys will need to be employed in many cases. Most of the new help will be entirely unfamiliar with orchard operations, so they'll need some schooling in the art of harvesting apples.

Here are six points outlined by McMunn which will be a big help to apple growers in harvesting their 1943 apple crop. First, assume the help knows nothing whatsoever about picking and packing. Take the picking crew to the orchard and show them how to set ladders, how to eliminate fingernail punctures and bruises and how to empty the fruit into the field crates. Show haulers how to load the truck to avoid bruising. Check the grading machine for places which may bruise or cut fruit. Instruct each set of operators in the packing shed regarding special duties to be performed. And last of all, remember the operations which seem simple to you may be difficult for a beginner, so give detailed instructions for every job.

Following these suggestions will help toward getting better fruit to market, which will command a maximum selling price.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.



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SEVENTY-FOURTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture

Speaking time: 5:45 minutes

September 16, 1943

(FOR BROADCAST USE ONLY)

SEP 20 1943

UNIVERSITY OF ILLINOIS

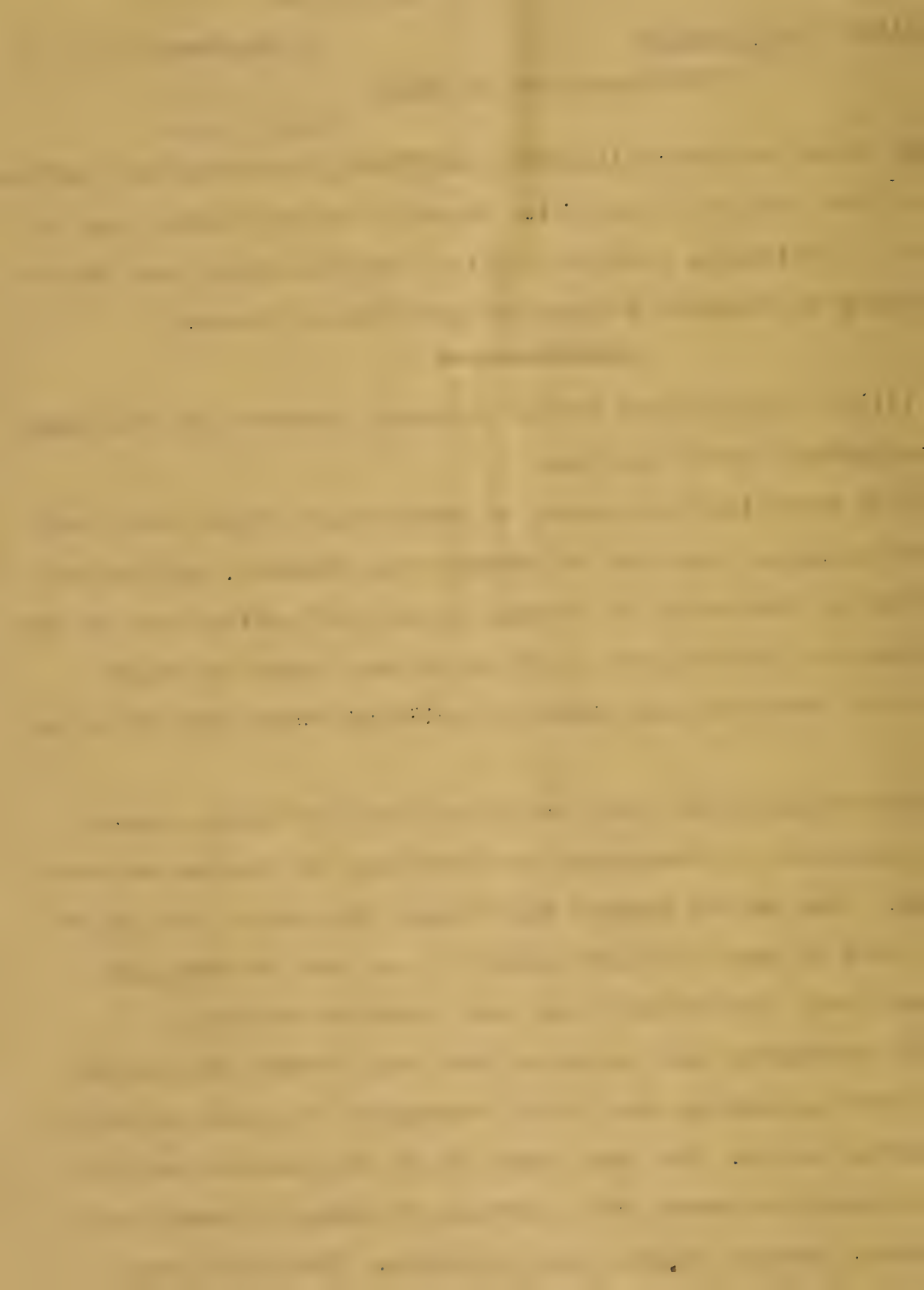
(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:30) This fall and winter farmers, truckers and railroads are jammed up against a tough problem.

With more livestock coming to market this October than last, and a record supply of hogs due in November and December, agricultural economists of the University of Illinois College of Agriculture and the U. S. Department of Agriculture point out we have fewer and older trucks and only about the same number of railroad stock cars to do the hauling.

The economists do note that since this past year, pickup service has improved, cross-hauling has decreased and trucks are more fully loaded. They expect further improvement this fall. They think the fewer trucks on hand can carry almost 95 per cent as much livestock as last year. But we have much more livestock to haul.

The economists also estimate that many farmers and ranchers may spread their marketings more evenly throughout the week and over a longer marketing period. But they point out to hog farmers that if lack of transportation forces the marketing of spring farrowed pigs beyond December, further feeding will be needed. That would mean marketing at heavier weights and so cause a drain on the short feed supply.



So farmers who can market early are urged to do so. Market early and avoid the congestion that is likely to occur later.

(1:00) Pretty soon now, a lot of soybeans will be going into storage.

In storing soybeans, the important point is to make sure the beans are dry when they go into the bin.

Agricultural engineers of the University of Illinois College of Agriculture and the U. S. Department of Agriculture point out that the safe limit on moisture in soybeans is about 13 per cent if the beans are to be held for several months. But the exact amount depends on the weather, and on how the beans are stored and for how long.

As a practical tip in handling soybeans, we want to keep in mind that the amount of moisture in soybeans varies a lot at different times in the day.

A year ago this October, investigators found that soybeans in one field contained more than 15 per cent moisture at 8:30 in the morning. The beans were too damp to store. But, by 1:30 in the afternoon, the moisture had dropped to about 10 per cent. By late afternoon, the beans had dried out even more.

During good drying weather, soybeans may dry out enough by late morning or early afternoon to store safely even in unventilated bins.

If the soybeans contain 13 per cent moisture or less, they will keep in a good storage house with little danger of damage.

(1:30) If your electric motors are like those on most farms, they're working longer hours these days.

In fact, rural electrification specialists say that motors are doing more jobs today on more farms than ever before--running pumps,

milking machines, cream separators, feed grinders and other production equipment. Frequently the same motor is moved from job to job from early morning to late at night.

Electric motors don't balk at long hours, however, provided they receive a little care and attention. And according to farm electrification specialists, these are some of the points to keep in mind.

First--oiling. Different motors have different types of oiling systems, so follow the directions of the manufacturer as to how to oil and how often. Remember, too much oil is a troublemaker.

Protect your motor from dust. Particles of grit, once they work their way into the bearings, grind and wear like an abrasive. Dust also fills up the spaces between the motor windings, preventing proper ventilation. Blow the dust out of a motor occasionally with a bellows or hand tire pump.

Be sure the motor is properly lined up with the machine it drives. Poor alignment increases the wear on bearings.

Finally, don't overload your motor. If a motor takes more than a few seconds to pick up speed or seems to labor or heat excessively, ask your dealer or the manager of your rural electric system for advice. Better to catch the trouble early before much damage is done.

(1:15) Neither commercial concerns nor the government can handle this year's big crop of sweet potatoes if the whole crop hits the market at the same time. They are depending on growers to send their potatoes to the market gradually to prevent waste, and to help bolster food supplies next winter and spring.

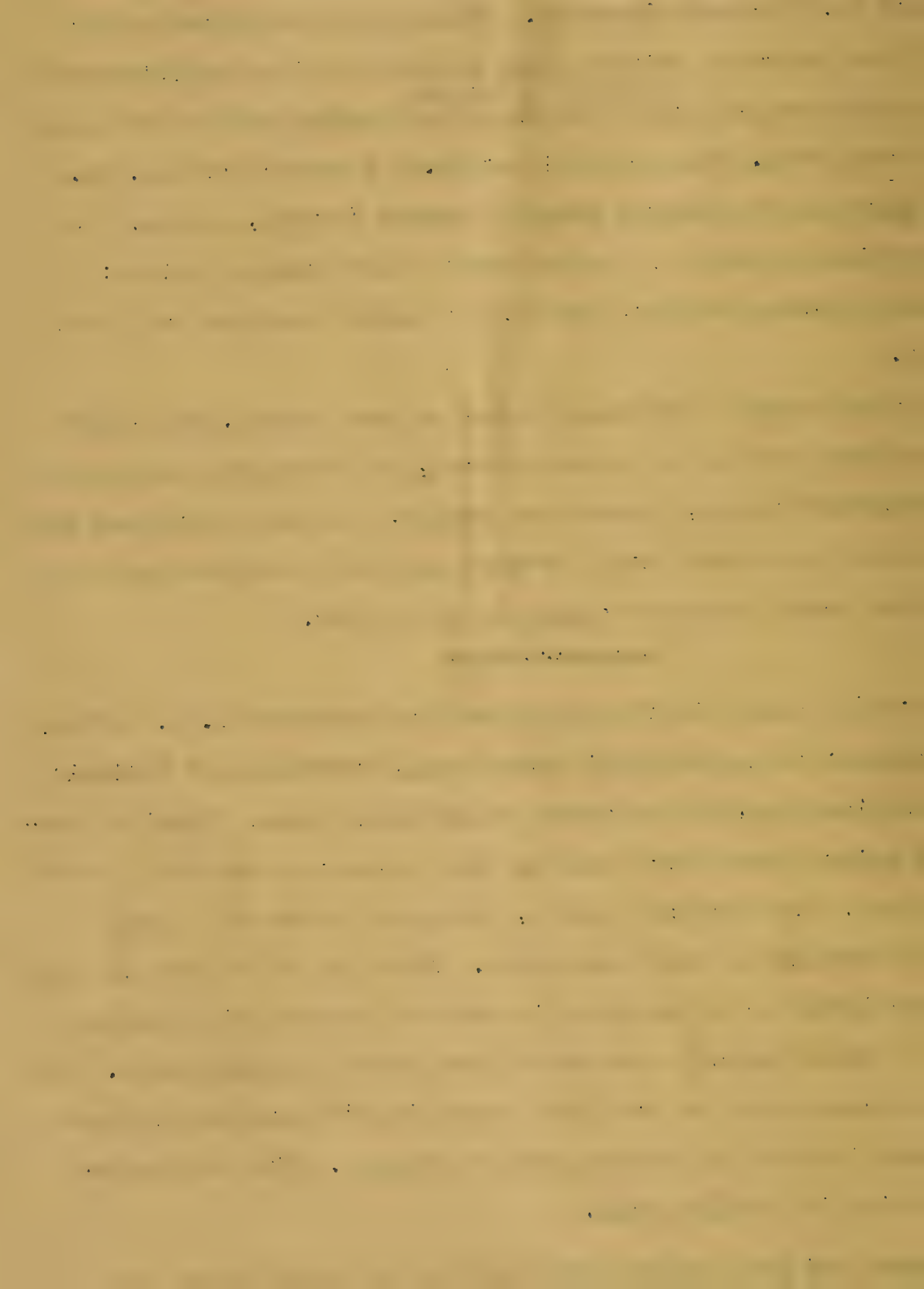
With the present support prices for sweet potatoes during the winter and spring, growers can afford to fix up buildings to cure and hold their sweet potatoes on the farm.

As you recall, the War Food Administration announced support prices of \$1.15 a bushel for cured or uncured sweet potatoes through November and \$1.30 through December. Those prices continue as they were. But the important thing to note is that the Food Administration boosted the support prices/for the winter and spring markets to enable growers to hold them. Farmers will get \$1.50 a bushel for U.S. No. 1 or better cured sweet potatoes marketed during January, and \$1.65 a bushel beginning February 1. Let me repeat those support prices: \$1.50 a bushel during January, and \$1.65 a bushel starting the first of February.

To be eligible for those higher support prices, the sweet potatoes not only have to be properly cured, but they also have to be packed in standard crates, baskets or hampers. The sweet potatoes also must be offered in carload lots. Growers who have less than car lots can pool their sweet potatoes to make up a full car.

(:45) I have a little note here from Professor D. G. Carter, of the department of agricultural engineering, University of Illinois College of Agriculture, on temporary or emergency silos. They're something we're going to need this year in order to save every bit of feed we possibly can. And for that reason, Professor Carter is placing considerable emphasis on the trench silo. It can be built for the labor cost only, as little or no material is required unless it's desired to curb, line or cover the silo for added convenience and durability. He says trench silos should be used only where there's good drainage and where the soil is firm and doesn't cave in readily. The most satisfactory location is along a slope.

Fence and paper silos have proved satisfactory where such materials can be obtained.



Information pertaining to building a trench silo, along with other temporary and emergency silos, is contained in a leaflet just off the press at the University of Illinois College of Agriculture. It's number 400 and it's free for the asking. Address your request to this station. Just in case we may have an early frost this year and are caught with a lot of soft corn on our hands, these temporary silos which can be erected rapidly and economically may come in mighty handy. So we'd suggest you write for your free copy of leaflet 400 as a protective measure.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

Speaking time: 3½ minutes

September 20, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: We bring you now the ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(:15) The twenty-fourth annual conference for Illinois veterinarians will be held at the University of Illinois College of Agriculture on Wednesday, October 6. This is a war emergency conference on diseases of swine held in cooperation with the Illinois Veterinary Medical Association.

(:15) If sheep raisers are going to dip sheep for ticks, it should be done early in the fall, according to H. B. Petty, extension entomologist, Illinois State Natural History Survey.

Mixtures of nicotine have proved successful in dipping to control ticks. Follow the directions of the manufacturer. A second dipping should be made about three and one-half weeks after the first. Petty says that you'll want to keep the sheep out of the pasture they were in for at least six weeks.

(1:00) The time to inspect a machine for repairs is just as soon as you finish using it for the season, according to R. C. Hay, extension agricultural engineer, University of Illinois College of Agriculture. Machines that farmers have now finished using for the season or will complete the use of within the next month can be checked and tagged most satisfactorily before they are put away for the winter.

A shipping tag on which needed repairs and adjustments are listed is probably the most convenient way of recording such repair needs. Then the repairs can be made the first slack season or rainy day rather than to wait until the winter weather when it may be too cold to do the work satisfactorily or during the spring rush when there is little time. Furthermore this practice will encourage early ordering of repair parts. Since there has been some delay in supplying important repair parts, such orders when made early will ease this situation.

Although in general the machinery situation is somewhat improved over last year there is no reason to believe that there will be enough machines to fill all orders. Therefore, it is especially essential that every farmer keep machinery conservation foremost in his mind and make the best use of present machinery. If combines and corn pickers have not been put in the best of shape for the coming season, they should be given attention immediately.

(1:00) Clovers supply the main dish in the "soil fertility meal" for all other crops in the rotation, says L. B. Miller, agronomist, University of Illinois College of Agriculture. The clovers are the beefsteak, so to speak, for our corn and soybean crops. Without the regular growth of clovers, even our most fertile soils soon become low in nitrogen and are unable to produce high yields.

A very high percentage of our legume seedings, whether for hay, pasture or soil improvement, are made in small crops. The tiny legume plants establish themselves while the grain is growing and must compete with it for nutrients and for space. If fertilizer is needed for the legume, it's usually too late to put it on after the grain is harvested. Therefore, in seeding wheat this fall, for example, we'll want to get enough fertilizer into the seedbed now or at seeding time to take care of both the wheat and the clover which we plan to seed in March.

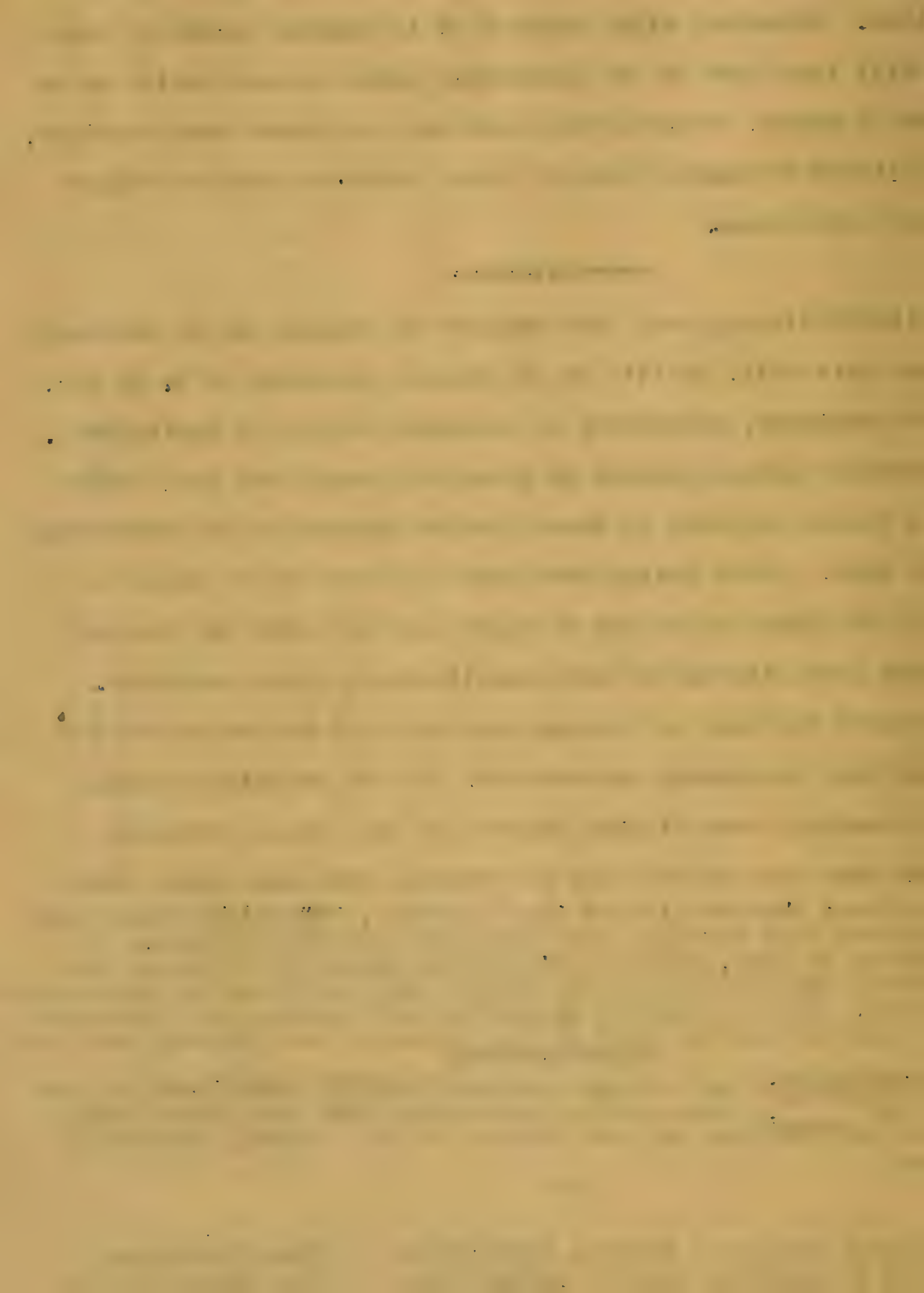
Three hundred to four hundred pounds of 20 per cent super-phosphate will be needed to take care of the requirements of a four-year rotation. Likewise, eight hundred to 12 hundred pounds of rock phosphate will take care of the phosphorus needs on most soils for at least 10 or 12 years. Where both potash and phosphorus are deficient, mixed fertilizers containing both of these nutrients can be drilled to advantage with wheat.

(1:00) Sloping crop land subject to erosion can be terraced to advantage this fall, if it's to be plowed, according to R. C. Hay, agricultural engineer, University of Illinois College of Agriculture. When well-sodded terrace outlets or grass waterways have been established in a field, terraces to check erosion losses can be constructed at the same time. Field trials show that terraces can be satisfactorily built on slopes up to six or eight per cent with the tractor and moldboard plow, instead of more complicated grading machinery. Well-constructed terraces on sloping cropland will be subject to far less erosion than previously experienced. By the use of terracing and contour farming, some sloping fields can be so well protected from erosion that they can be used in rotation with more level land on the same farm; whereas without the terracing, they might eventually become so eroded they could be used only for pasture or meadow. If terracing is to be done, certain precautions should be followed, Hay says. Terraces should be carefully staked out, according to recommended specifications. Terrace outlets should be well sodded, and the operator should plan to farm the land on the contour after terraces are built.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture, and the United States
Department of Agriculture cooperating. E. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914



Speaking time: 3½ minutes

September 23, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(:45) And there goes another farm building up in smoke. I certainly hope it didn't happen in your neighborhood this morning, but I do know it happens somewhere in the United States every fifteen minutes. Now with Fire Prevention Week just around the proverbial corner--it begins October 3--let's check on some of the things that might keep our farm house or barn from burning up. Here is a partial list of fire hazards compiled by E. W. Lehmann, head of the department of agricultural engineering, University of Illinois College of Agriculture: defective chimneys and flues, lightning, sparks lighting on flammable wooden roofs, careless handling of matches and cigarettes, careless use of gasoline and kerosene, defective and improperly installed stoves and furnaces, faulty wiring and misuse of electrical equipment. It will pay us to pause and take stock of these right now or during Fire Prevention Week, beginning October 3.

(1:15) Plan now for soybean storage is the suggestion which comes to us from D. G. Carter, of the Agricultural Engineering Department, University of Illinois College of Agriculture. He says that in many localities local elevators may not be able to handle the crop as fast as it is harvested. Coupled with temporary shortages that may develop in freight cars, many farmers will have to provide for their own storage.

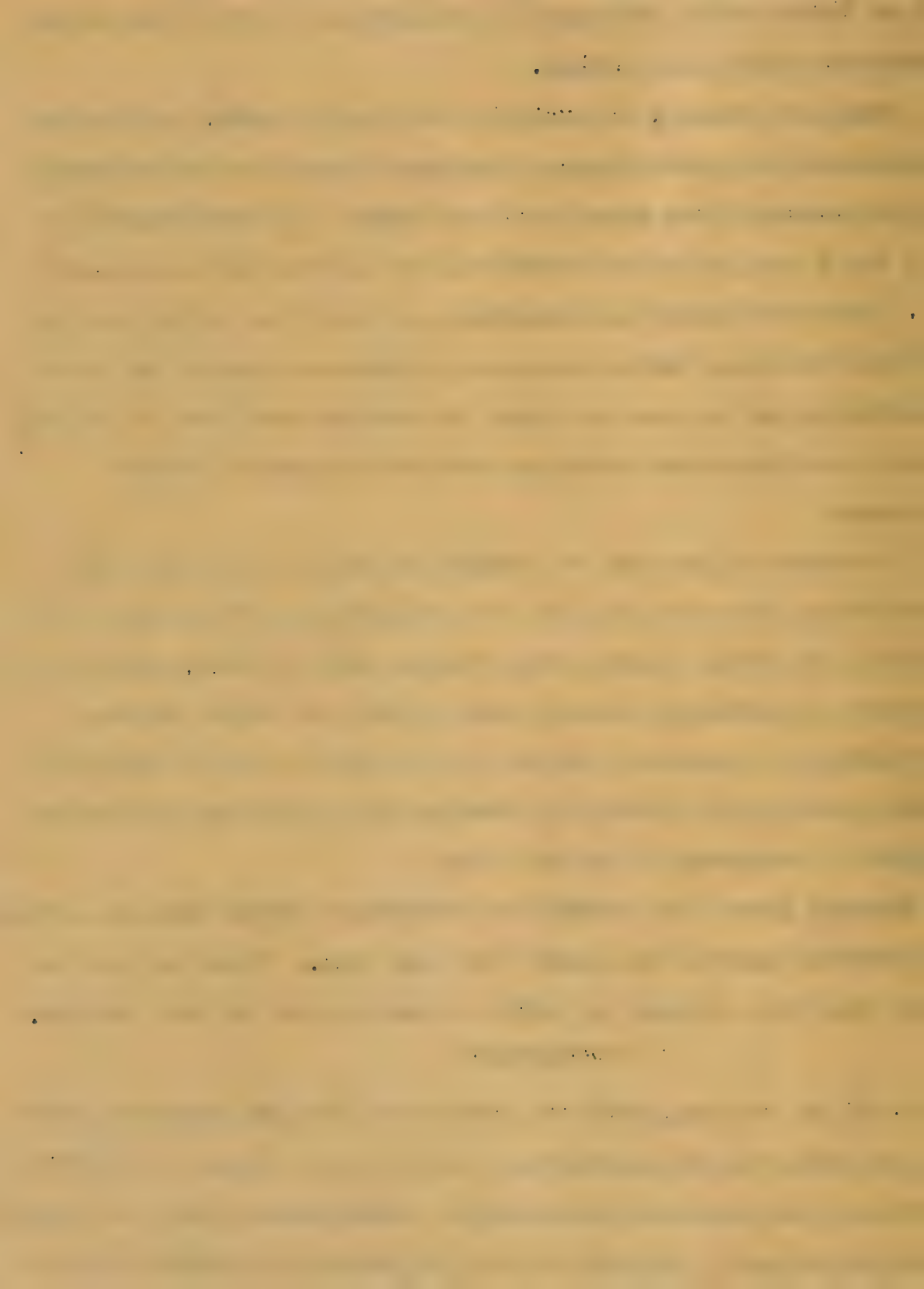
Triple A committees will have a number of prefabricated wooden bins for sale this year, Carter says. These bins are of the same type as those used a year ago in the southern part of the state, and the soybeans kept well in them.

Some more framing is available at lumber yards, and farmers who need material for grain storage bins are allowed an AA2 priority which can be obtained from your local war board. If wood framing is available, the floor, walls and roofs can be enclosed with nonlumber materials. Concrete floors are excellent, if built on a fill and the ground is well drained. Asbestos-cement, structural sheets or other rigid panelboards may be used in place of wood or steel for the walls. Various roof sheathings and coverings are to be found in lumber dealers' stocks.

If storage space can be provided on the farm in buildings already available, the cost will be less than for new bins, and scarce materials will be saved. Empty horse stalls, old oat bins, unused corn cribs or space in machinery storages may afford the needed space. Special attention is required, Carter points out, to secure the same tight walls, strength in floors and framing and protection from moisture as would be recommended for new bins.

Several plans for movable and stationary grain bins are available at a printing cost of ten cents for each plan. These may be obtained from your farm adviser or address your request to this station.

(:30) By the way, have you contacted your AAA community committeeman and given him the production record on your farm for 1943? If not, see him at your earliest convenience. Committeemen will not visit the farm as in the past, but will depend on farmers to contact them or the county AAA office and furnish the needed information if such was



not obtained at a local meeting. This change in procedure is being followed to save labor, increase economy, and to place more responsibility on farmers for successful operation of the program. Remember, if you fail to report for your farm, no payment can be made even though you may have earned one.

(1:00) I'd like to take about sixty seconds now to get in a good word for lespedeza. You probably know it's rapidly becoming the principal legume crop on many farms in the southern third of Illinois. In fact, it's grown to some extent throughout the entire state. It's my understanding from W. L. Burlison, head of the agronomy department, University of Illinois College of Agriculture, that some 200,000 acres of lespedeza are grown in this state.

It's a crop that has a lot of merit. For example, it will grow on soils too acid for alfalfa and clover, it's drouth resistant, can be seeded at a low cost, makes excellent hay and pasture, and for some reason or other insects and diseases don't seem to bother it as much as they do clover and alfalfa.

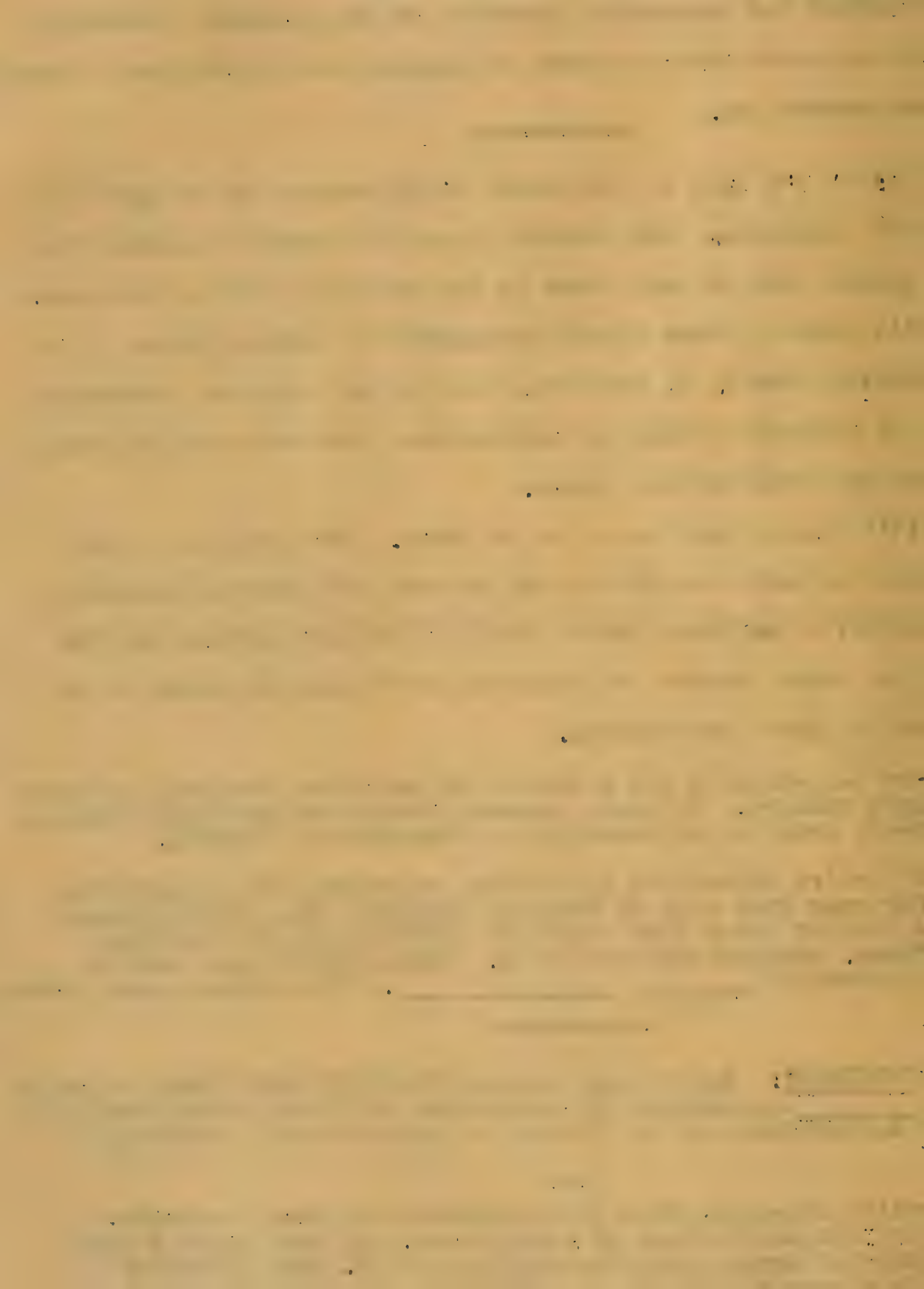
Now lespedeza is not a clover any more than cowpeas, soybeans or alfalfa are clovers. It does, however, belong to the legume family, and you already know the soil-enriching properties of legumes.

If you're interested in seeding lespedeza, I'd suggest that you write for your free copy of Illinois Circular 561. This 20-page illustrated leaflet gives some excellent information on varieties, seeding methods, adaptability and so on. Just address your card to _____ in care of _____, _____. The number again, 5-6-1.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture, and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 3 and June 30, 1914



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SEVENTY-SEVENTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture

Speaking time: 3 minutes

September 27, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: We bring you now the ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:00) Could you milk another cow or two this winter? I was just thinking that if you had plenty of roughage and an empty stall or two, you and several more like you could prevent good cows from going to the stock market. Maybe you could sell one or two low-producing cows and buy replacements that use feed to better advantage.

In glancing over a report from E. E. Ormiston, of the dairy department, University of Illinois College of Agriculture, he points out that it's the small herds and family cows that will determine whether or not we are able to meet our national goal for milk production. The reason for this is simple. Only about one-third of the dairy cows in this country are found in herds of 11 cows or more. The same thing is true for Illinois. Now our state has 1,200,000 dairy cows but only about 17,000 herds of 11 cows or more.

You won't get rich milking a couple of extra cows, Ormiston says, but your income will be increased and your efforts rewarded. Furthermore, twice daily when you sit down to milk you can have the satisfaction you're making an important if unspectacular contribution to the war effort. The production of more milk is one of the most critical needs in the nourishment of our civilian population, our armed forces and our fighting allies.

(1:00) Now is the time when better strawberry growers are getting their mulching material ready to apply. It's a tip for you and me even though we may have only a couple of short rows in our backyard garden, too. According to A. S. Colby, specialist in small fruits, University of Illinois College of Agriculture, this year has been abnormal, or perhaps we should say unfavorable, to strawberry plant production. Now judging from prices paid for strawberries, the past spring coupled with the present and future food situation we just can't afford to pass up our duty of mulching what strawberry plants we have this fall. Of course, you won't need to mulch the berries until a little later on---say sometime in November when temperatures are dropping to around 20 above. But now is a good time to locate the straw you need and haul it to the edge of the patch where it can easily be put on when the time comes for mulching. You folks in town who have just a row or two in your garden may be able to pick up a bale or two of good wheat straw out in the country or even at the feed store. Wheat straw free from weed seed is the best strawberry mulch, Colby says. Oats straw is next. Other mulching materials run on about a par, with corn stover and leaves last. If stover is used it should be chopped into relatively small pieces so that it will pack better, thus providing better insulation. Leaves lie too closely on the plants, having a tendency to pack and smother them. Use stover or leaves as a last resort. But remember to mulch strawberries and get that mulch ready now.

(:30) Let's face the facts about fires. Thirty-five hundred lives are lost in farm fires every year in this country. There's a 100 million dollar loss in farm property the same way, too. We're burning it up at the rate of one farm building every 15 minutes.

Furthermore, 85 per cent of these fires is due to carelessness or neglect. Now Fire Prevention Week, beginning October 3, is a good time to resolve to hang up the lantern instead of setting it behind the cows, install lightning rods, replace old flammable roofs with fire-retardant material and keep the home fires burning--in the fire-place.

(:30) Here's a note on paint poisoning, which comes to us from the department of animal pathology and hygiene, University of Illinois College of Agriculture. With farm owners giving their buildings a new coat of paint this fall, special precautions should be taken to prevent livestock from having access to old paint buckets or to recently painted buildings. Cattle, especially, are easily killed by eating small amounts of paint which contain lead.

Lead poisoning is quite frequently found to be the cause of serious losses of livestock on farms where cattle have been allowed to lick, or otherwise acquire, small amounts of lead from the surfaces of buildings, fences or other equipment that have recently been painted.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

Speaking time: 3 3/4 minutes

September 30, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

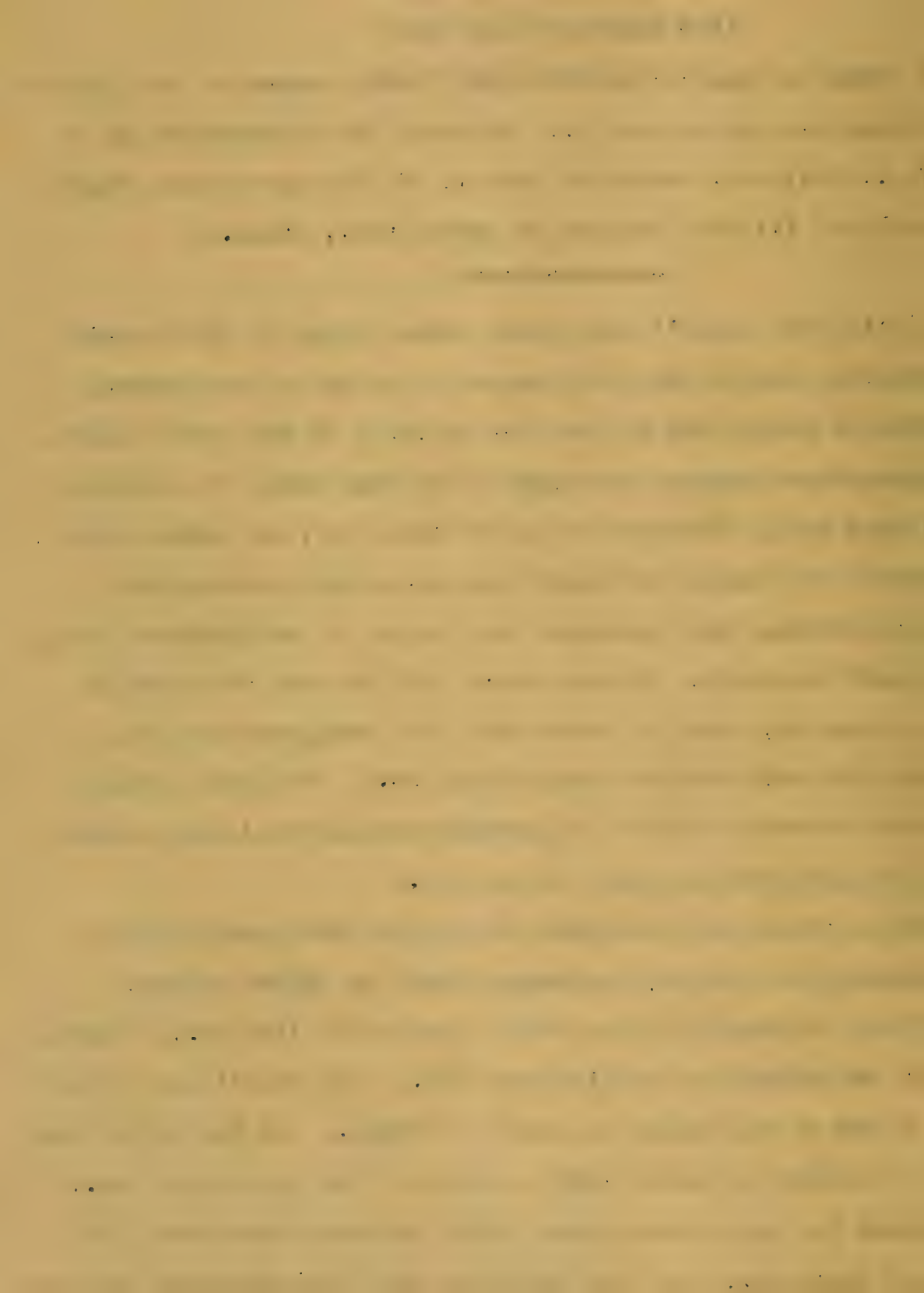
(1:15) Who doesn't like green onions early in the spring?

They're one of the early crops we get out of the garden.

Now if you'd like to have the earliest of the early onions, vegetable specialists suggest you might plant some bulbs of perennial tree onions this fall. They should be set three or four inches deep, which will avoid the danger of injury from alternate freezing and thawing. In addition, this increases the length of the blanched stem, the portion most desirable. Winter onions will do much the same as winter grain crops do, that is, start this fall and grow roots and some tops until the cold weather clamps down hard. Then next spring when it begins to warm up they'll be established and will grow rapidly and be ready to eat about as early as any crop.

These onions are sometimes known under the name of potato onions, perennial tree onions, asparagus onions or winter onions.

There is something else about them you'll like too. They'll produce their own bulbs for planting next fall. All you'll have to do is to leave a few of the onions to grow next spring. At the top of the onion stems a cluster of about half a cupful of the bulbs will form. Late next summer you can harvest those bulbs and keep them until the middle of next September. And that will be your planting stock for next fall. You can also propagate the onions by planting from a division of



the clump of onions that develops in the soil. So you see if you get a start of the bulbs this fall you can grow your own early onions every year from now on.

(1:00) And now, a special message for the 2 1/2 million farmers who are producing food with electric power.

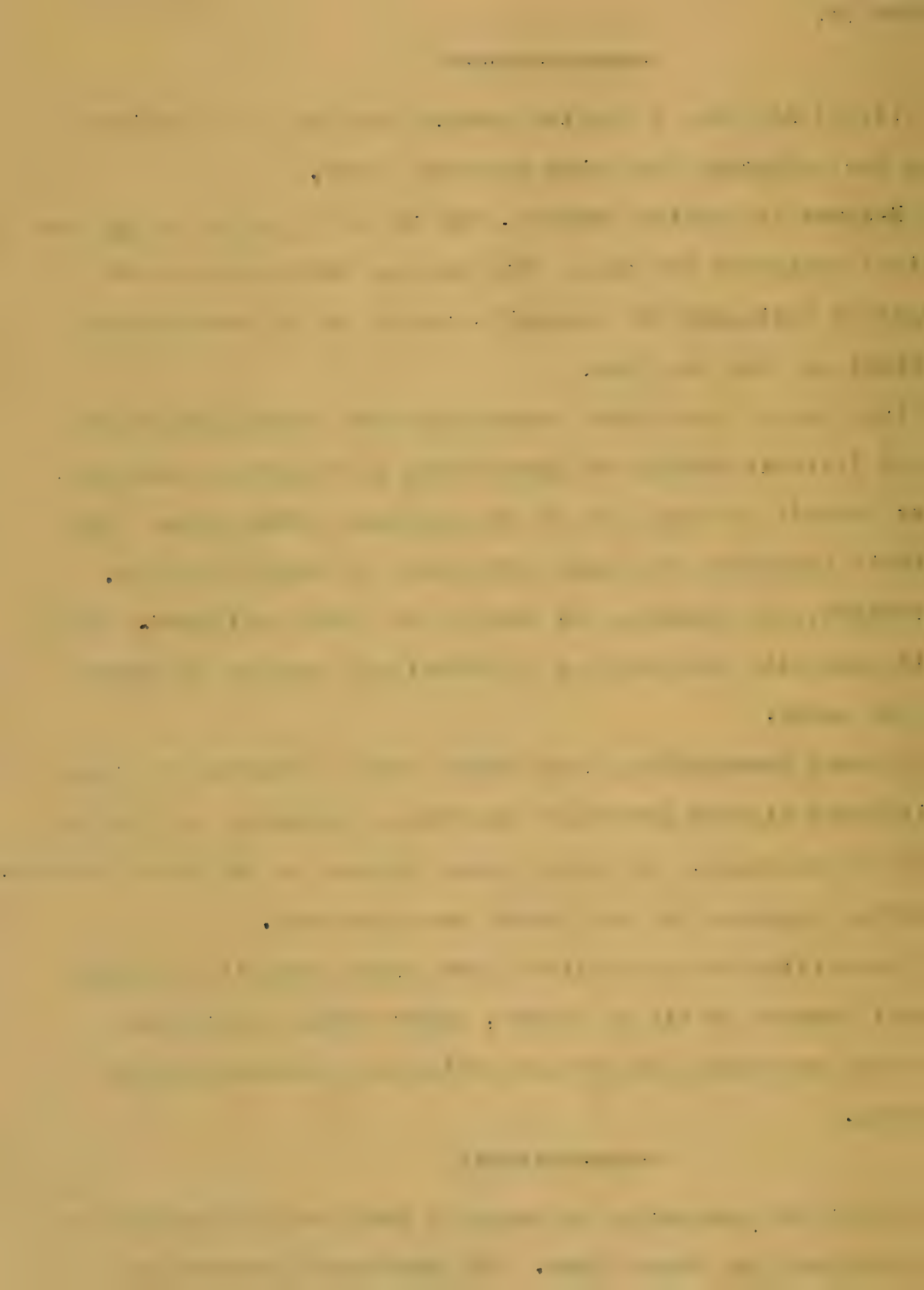
Because of wartime demands, you may not be able to buy the new electrical equipment you need. But you can build many of the simpler types of equipment for yourself, mostly out of noncritical materials right on your own farm.

In a report from rural electrification specialists to the University of Illinois College of Agriculture it is pointed out that many farmers haven't let the lack of new equipment stump them. They are using their ingenuity and skill with tools to build their own electric brooders, egg coolers, hay hoists and other equipment. This equipment is generally inexpensive, efficient and capable of saving food, time and money.

In many communities, high school manual training and vocational agriculture classes have made electrical equipment, selling it for the cost of materials. In other places farmers in the same neighborhood have gotten together to build their own equipment.

Electrification specialists also report that it is common for individual farmers to rig up clever, labor-saving electrical devices of their own which are in turn copied and improved upon by their neighbors.

(1:00) The government is going to have most of the beef it buys in the boneless and frozen form. The government purchasing agencies have told the meat suppliers to deliver 80 per cent of the



government requirements in boneless, frozen form. The other 20 per cent of government requirements can be delivered with the bones in it. Government purchases now amount to about one-fifth of the beef dressed in federally inspected packing plants.

The Army had a little boneless beef during the last months of World War I and has had considerable during this war. Now, under a plan devised by the Food Distribution Administration, the Army can get more beef in frozen boneless form.

Boneless steaks, roasts and stew beef and ground beef are needed by the Army because 2 1/2 times as much boneless beef can be put in the same space as meat with bones in it. So, it takes less shipping space in trains, boats and trucks to get boneless beef from the packing houses to the front--it is easier to cut and it takes less space in the stoves when it arrives at the front. And when boneless beef goes into the fighting men's kit it is all meat.

(:30) In the corn belt this year, scab damaged a lot of winter wheat and spring barley.

State and federal grain men report that much of the damaged grain germinates poorly.

So in planting winter wheat this fall, the grain specialists recommend that growers select the best seed they can get. Then, fan and clean the grain thoroughly to get out any scabby and lightweight kernels still in the seed.

As a further step to control scab, treat the seed with organic mercury. Experience indicated that treatment of seed often gives considerably better stands of grain.

For information about treating diseased seed, get in touch with your farm adviser or the University of Illinois College of Agriculture.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

Speaking time: 5 3/4 minutes

October 4, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(:30) If you want to help save 3500 lives this year, check over the fire hazards on your farm during FIRE PREVENTION WEEK beginning October 3. The farm fires that occur in this country every fifteen minutes take a toll of 3500 lives and destroy almost 100 million dollars worth of property. When we stop to consider that about 85 per cent of such fires are a result of carelessness, there's no question of each one of us being able and willing to do something about it. That's why we're having FIRE PREVENTION WEEK as a time to check over and eliminate all fire hazards on our farm.

(1:15) "No, it isn't the corn leaf blight that is so destructive farther east, is the answer being given by Benjamin Koehler, chief in crop pathology, University of Illinois College of Agriculture, to the many Illinois farmers who are asking why their corn is turning yellow prematurely. You know, corn leaf blight has taken its toll in southern Ohio as well as southeastern Indiana, and Illinois farmers are fearing it's rearing its ugly head in this state. It seems to be a disease affected by weather conditions in that section. Selected open-pollinated varieties are not affected as much as the hybrids which have been largely introduced from Illinois. Illinois hybrids were not developed with resistance to corn leaf blight simply because this disease has never been a major factor in the state.

REIGN OF HENRY THE SEVENTH

BY JOHN HALLAM, ESQ.

LONDON: PRINTED BY J. JOHNSON, ST. PAULS CHURCH-YARD, 1780.

IN TWO VOLUMES.

THE SECOND VOLUME.

CONTAINING THE HISTORY OF THE REIGN OF HENRY THE SEVENTH.

FROM THE YEAR 1485 TO 1509.

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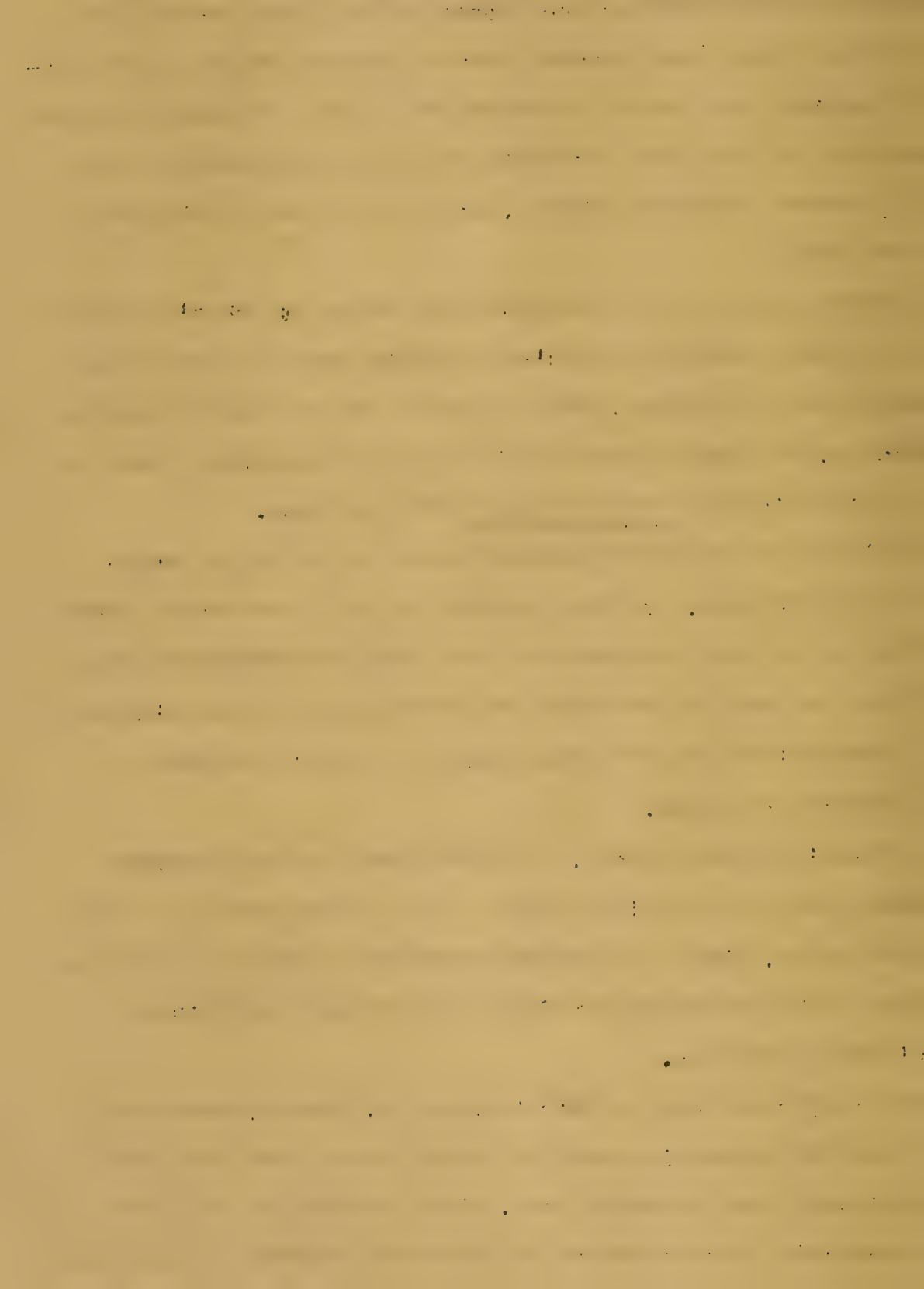
However, Dr. Koehler points out that the real major cause ^{corn} of/turning yellow prematurely this year in Illinois is a result of Stewart's disease which weakens the plants so that they are subject to diplodia stalk rot. Some farmers seem to welcome it as a preventative measure against corn being nipped by the frost. We must discount this considerably in that corn suffering from diplodia stalk rot has a tendency to become light and chaffy, and a little later the stalks may break down badly.

Of course, even though you have the answer to what's causing corn to turn yellow prematurely you're wondering what's to be done. Right now there isn't anything. But if you're one of the fellows who had some trouble, Dr. Koehler says to keep an eye on hybrids that are resistant to diplodia stalk rot for your 1944 planting.

(:45) It's about third down and seven to go in the last-minute appeal for turkeys. In other words, we still need about seven million of the ten million turkeys that the Army Quartermaster Corps is calling for. As most of you know, the turkeys are to provide the traditional Thanksgiving and Christmas dinners for our soldiers, sailors and marines overseas.

The time's getting short. In order that the men overseas will have turkey for their holiday dinner, the turkeys must be ready for shipment at once. While the turkey marketing season is later than usual this year, the Quartermaster Corps is convinced that turkey growers won't let them down.

Even if you have only a few turkeys, H. H. Alp, assistant professor of poultry extension, says to select those that are ready for market and send them to market now. Every turkey you sell for the next few days will go to members of our armed forces. So go over your flocks and select now those birds that are ready for market.



(:45) This is certainly no time to feed "one talent" hens, says H. H. Alp, assistant professor of poultry husbandry, University of Illinois College of Agriculture. He points out that a bird laying about 80 eggs a year, and there are a good many in Illinois, will require about $10\frac{1}{2}$ pounds of feed to produce a dozen eggs. A bird laying 200 eggs will only need five pounds of feed to produce a dozen eggs.

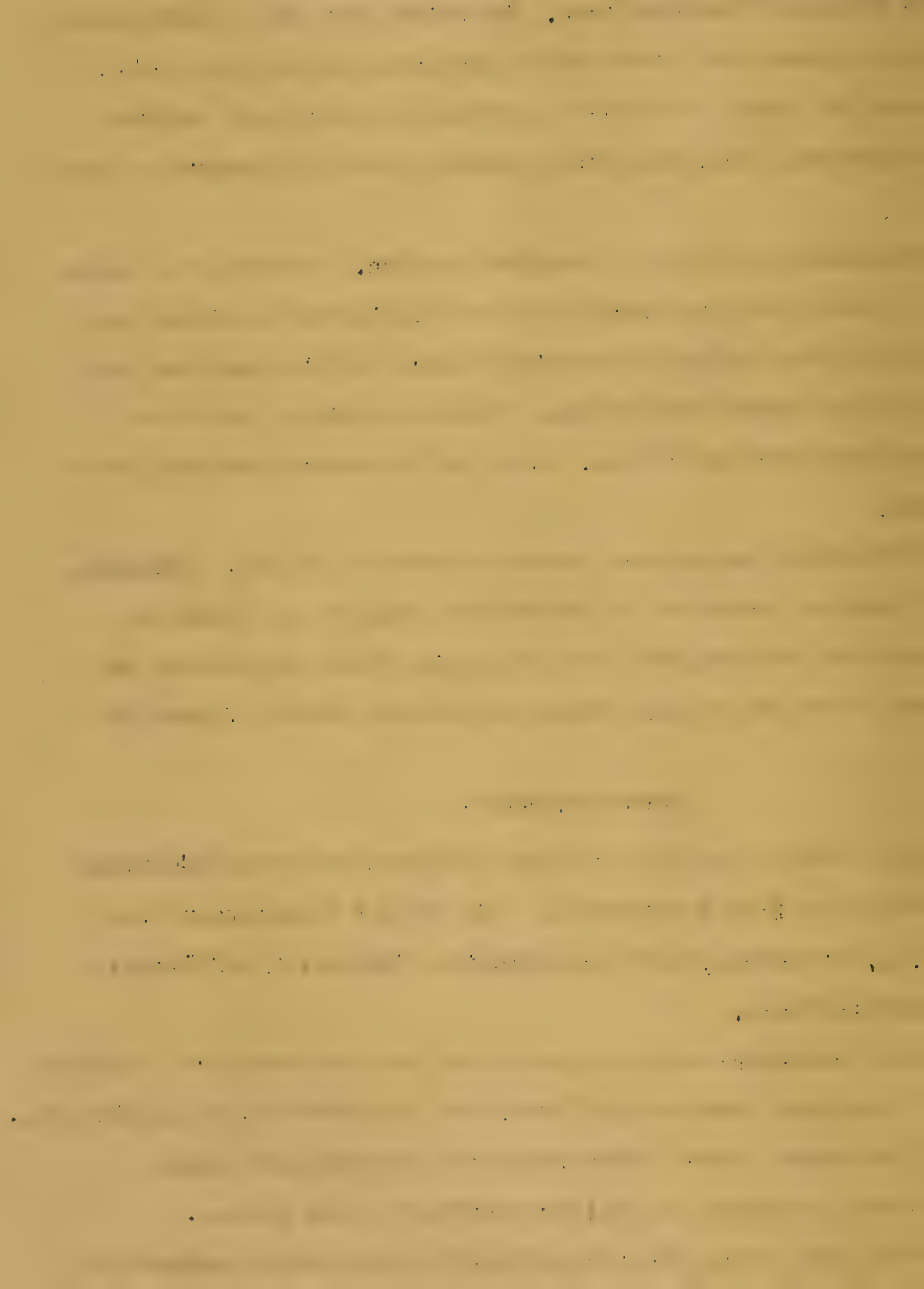
This waste of feed is a serious matter. In fact, any waste of feed in a year like this could well be considered as aiding the enemy. Poultry feeds enjoy a priority because of the need for eggs, which have a high nutritional value. Feed this winter won't be plentiful and may even be scarce. Every effort should be made to use it carefully.

Overfilling the hoppers causes a waste in feeds. Likewise, leaving the feeders uncovered or unprotected allows the birds to stand and scratch in them, and then the point which we started out with--keeping those one talent birds--is another waste of time and feed.

(1:15) Here is a report of the Illinois Education Committee meeting recently held at Springfield. The report comes to us from Chairman D. E. Lindstrom, rural sociologist, University of Illinois College of Agriculture.

State teachers' colleges point out that the number of students taking rural training have dropped from 464 in 1939-40 to 27 in 1943-44. Emphasis is now being placed upon setting up extension or night courses for rural teachers in various counties of the state.

It was also found that 10 per cent of all rural teachers in the state will be teaching on the basis of emergency certificates.



Some of these have come out of retirement, having taught before, some are just high school students who have taken a little additional training. The trend of salaries is upward having been increased from about 90 to 125 dollars.

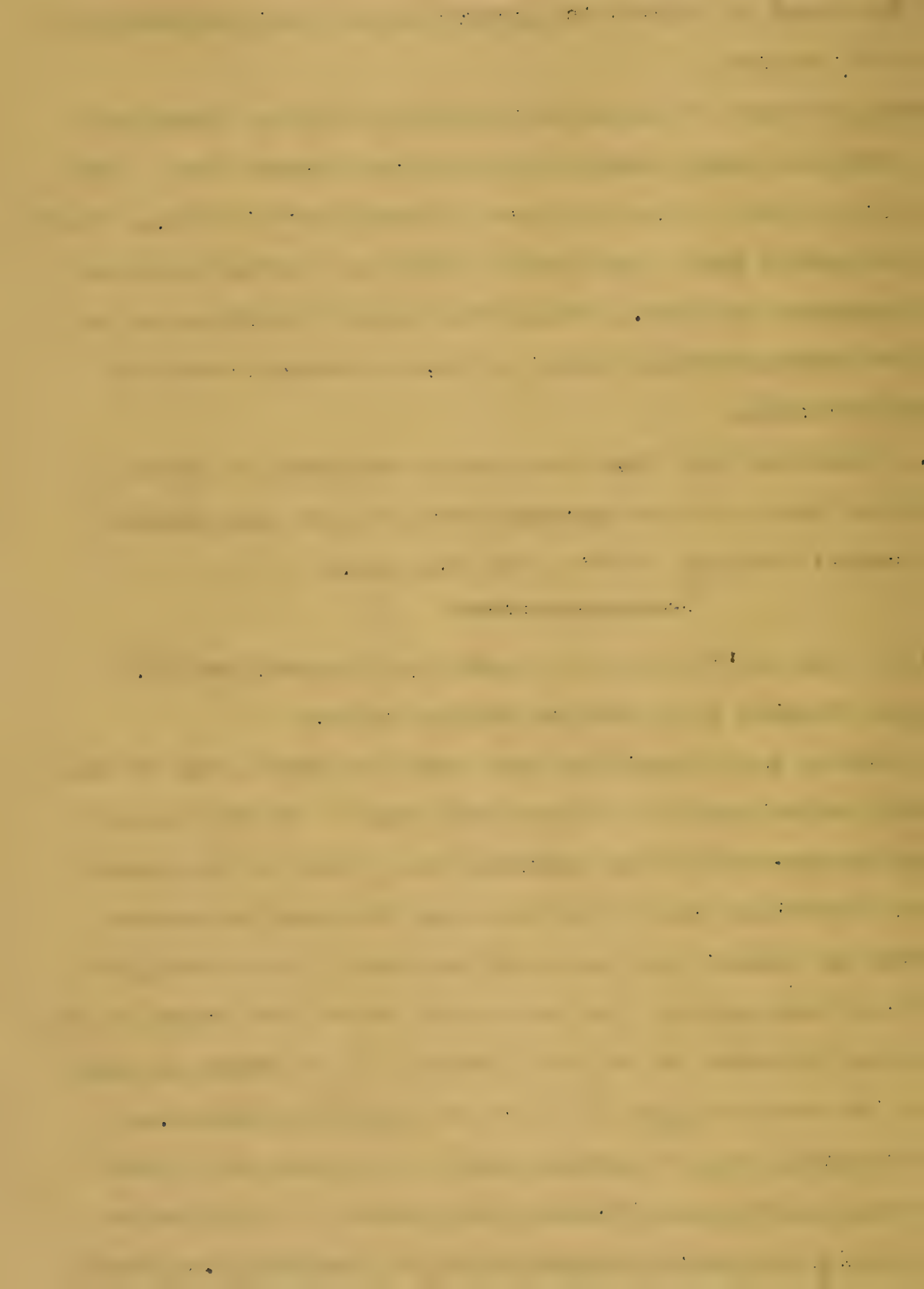
Transportation of pupils has been made easier. Those who wish to be reimbursed must comply with the motor vehicle laws. The drivers must be 21 years of age and have a chauffeur's license. Their cars can be inspected twice each year at the truck testing stations scattered throughout the state. While only school districts can be reimbursed for transportation, they, in turn, reimburse those who transport the children.

Dr. Lindstrom adds that the special committee on school lunches reported the state had appropriated a million and one-half dollars for school lunches. This is for food only.

(1:15) Now here's a note on peach tree borers from C. C. Compton of the Illinois State Natural History Survey.

Of course, you orchardists know that the adult moths of this pest have been active this past summer--and right up to the present time for that matter--depositing eggs near the ground on the trunks of the trees. Naturally these eggs hatch and the young borers eat their way into the tender inner bark and continue to feed during the warm days of fall and spring. You can easily detect the injury by the gummy masses you'll notice on the tree trunks. If we follow no control measure, the tree is quite likely to be completely girdled.

The chemical used to control peach tree borers is a great big, six-cylinder word called "paradichloribenzene." Don't ask me how to spell it; I had trouble enough trying to pronounce it. Some thoughtful person has shortened this chemical down to PDB so you and

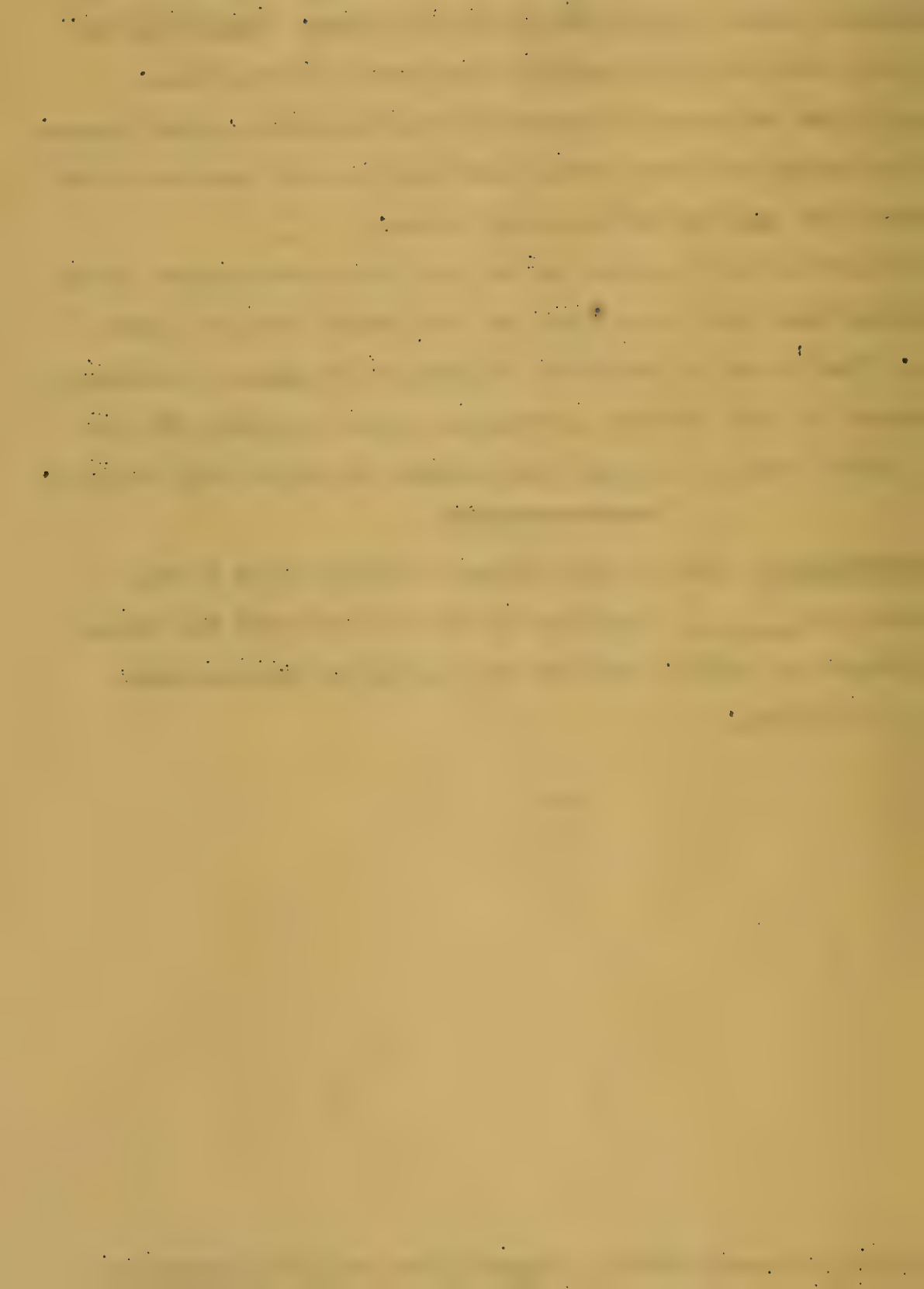


I can understand it a little better. All you need to do, as the commercial orchardist knows, is to smooth off the soil around the tree and sprinkle some of this PDB in crystal form. Completely encircle the tree but keep the crystals just away from the bark.

Compton says about an ounce is needed for bearing trees, about three-fourths of an ounce for trees coming into bearing and one-fourth to one-half ounce for one- and two-year-old trees.

PDB acts as a poisonous gas to the peach tree borers but it isn't effective when the temperature of the ground falls to about 55 degrees. That's why it should be applied right away, or certainly before November 1. For further information about applying PDB for peach tree borer control see your farm adviser or write this station.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.



EIGHTIETH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture

Speaking time: 3 3/4 minutes

October 7, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:30) In many sections of Illinois our woods and forests are especially dry right now.

Consequently we need to give special attention to cutting down fire losses in the forests as well as in the home and on the farm. Fire losses caused by carelessness are as real as if wrought by enemy bombers or saboteurs.

Briefly here are some of the safety rules for keeping down fires in the woods:

Care with matches and smoking materials, of course, is always called for. Watch where you throw them. Stamp out all burning cigarette butts or pipe heels. Cigarettes thrown from cars along the road cause thousands of fires. If there's an ash receptacle in your car, use it. If not, take along an empty can or bottle to put the butts in.

Always watch camp fires or warming fires in the woods carefully, and thoroughly extinguish them before you leave.

Burning brush or trash near the woods is especially dangerous. Some states require anyone who plans to burn brush to get a permit from the local forester. In any event, burn only in damp weather, when the wind is down, and watch the fire at all times. Have plenty of help and water and tools on hand to fight the fire if it gets away from you.

Fire Prevention Week is observed as a special time to check up on such things, but care with fire is of course something to observe the year round.

(1:30) Here's a word for farmers along rural electric high-lines--the government asks farmers to conserve electricity. Every time you turn off an unused electric light, you save fuel, transportation and man-hours of labor. And this means more power for aluminum plants, munitions works, shipyards and plane factories--as well as for production jobs on the farm.

But conserving electricity doesn't mean not using power. It means not wasting it--using every single kilowatt hour to the best advantage.

Rural electrification specialists offer these tips for conserving electricity.

Use good light when and where you need it, but don't leave lights burning in an empty room.

Don't let dust rob you of light by dimming out bulbs and shades.

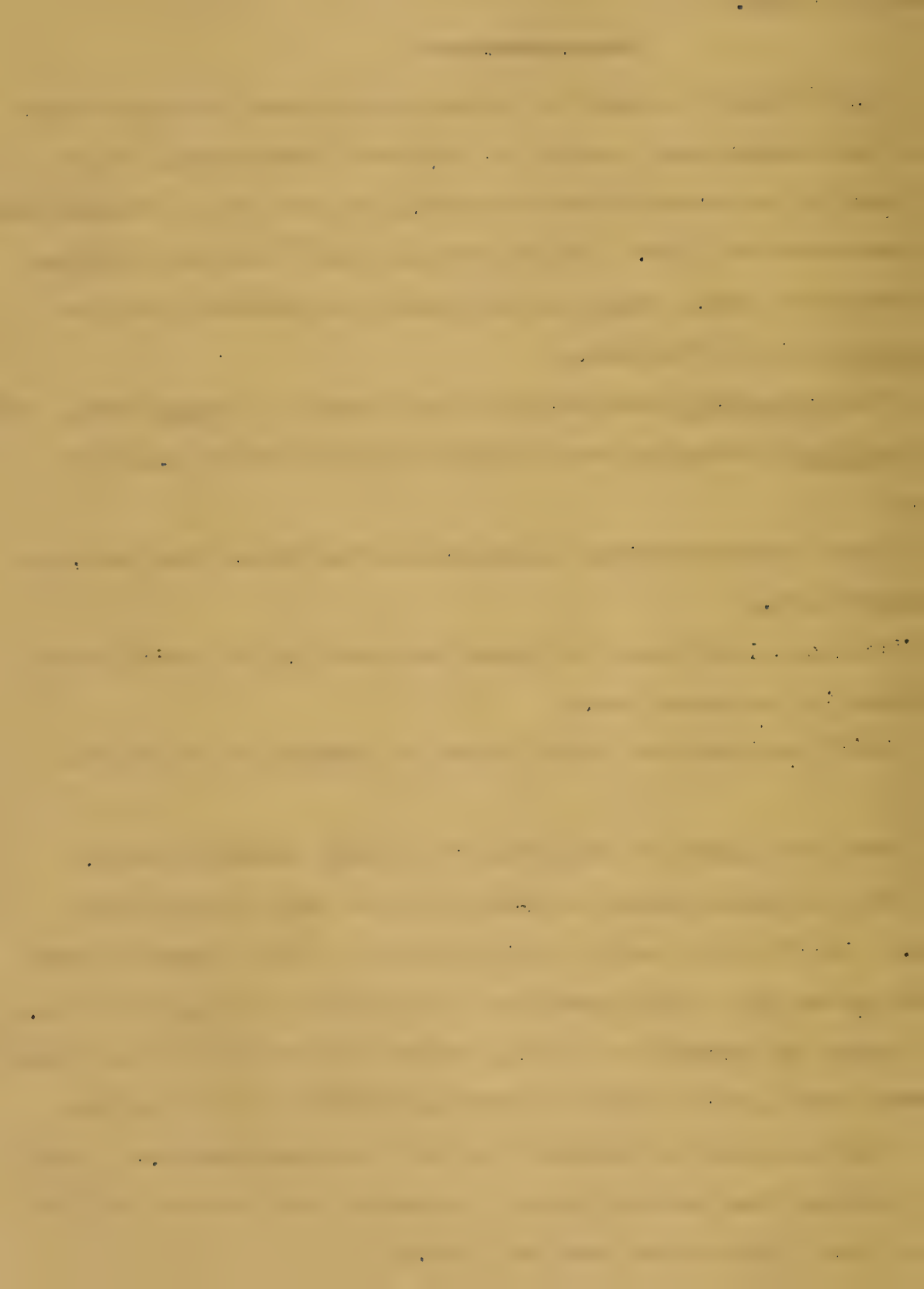
Turn the radio off when you are through listening to it.

Keep electric motors clean--free from dust, moisture and excess oil. Don't try to make a little motor do a big job--but whenever possible, see that a big motor has a job which uses all its power.

Watch the tension on belts. Belts that are either too tight or too loose waste power besides shortening the life of the motor.

Increase your efficiency in using a milking machine. Tests show that milking time may be reduced gradually to as little as four minutes per cow. This saves time and power.

Keep pumps properly lubricated. See that pistons are in good condition--leaking pistons make pumps work overtime.



Finally, try to spread your use of electricity. The manager of your rural electric system can tell you when the demand is heaviest. Then use as little power as possible during these hours.

(1:00) Here's something for you folks who'll be storing beans this fall for seed or otherwise. It's a leaflet on bean weevils, number NH 189, prepared by C. C. Compton, of the Illinois State Natural History Survey.

This leaflet gives you a good idea just how the bean weevil works and what he'll do to your stored beans if you don't treat with carbon bisulfide. And treating beans with carbon bisulfide to destroy bean weevils is easy if you follow the directions in NH 189.

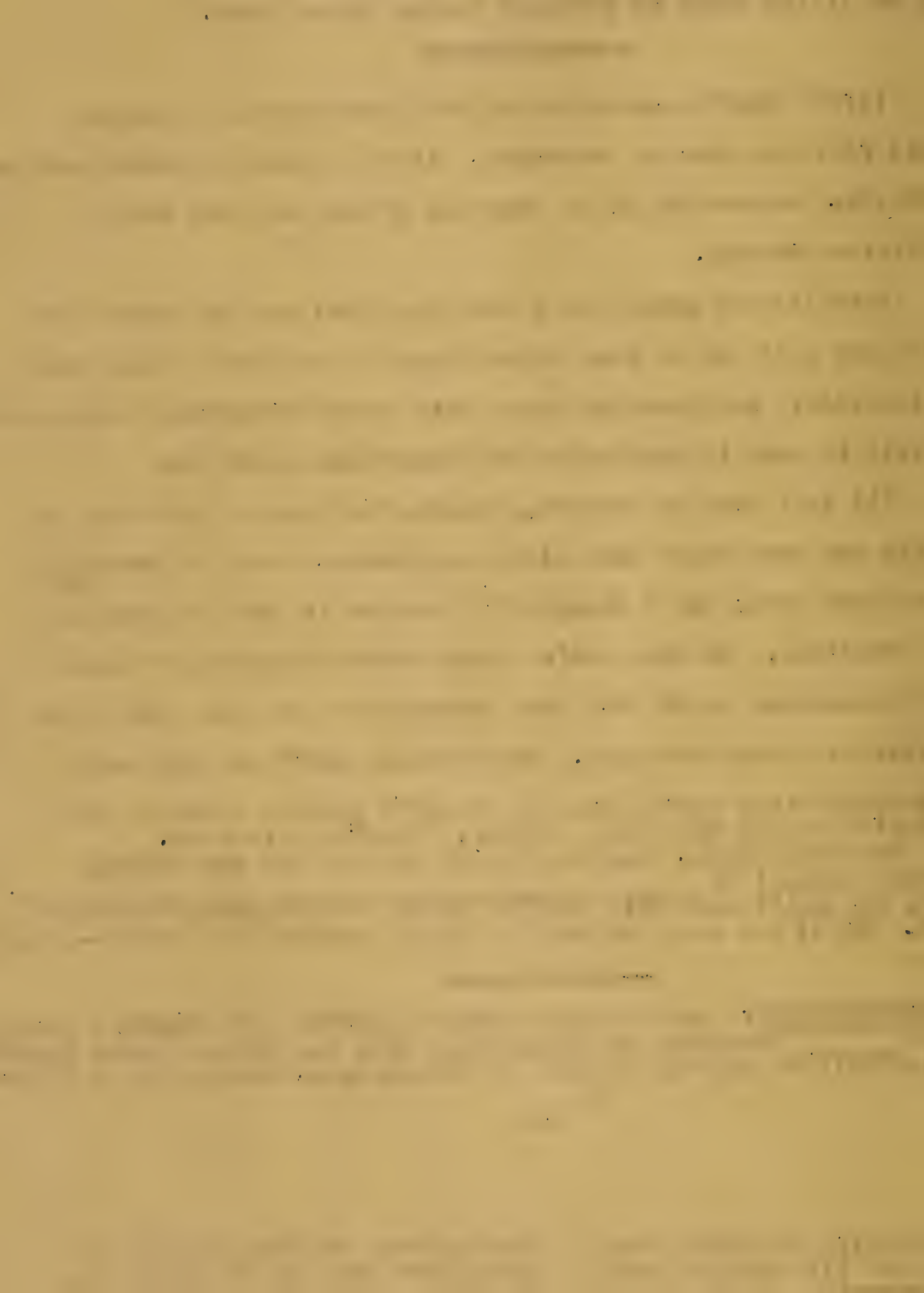
I'd just like to mention, though, that carbon bisulfide is inflammable and when mixed with air is explosive. Now, of course, a lot of you know that, but I thought I'd mention it just in case you may have forgotten. So when you're using carbon bisulfide to treat beans as recommended in NH 189, just remember to lay down your cigar or cigarette at a safe distance. Furthermore, don't buy any more carbon bisulfide than you'll use, as it isn't safe to store in the house. Don't breathe the fumes, either. They're poisonous.

One more point. Leaflet NH 189 is free for the asking. Address your request to _____ . Of course, you won't want this leaflet if you aren't going to store any beans. But if you are, for seed or food, remember the number--NH1-8-9

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914



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EIGHTY-FIRST
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture

Speaking time: 3 3/4 minutes

October 11, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:00) As nights grow colder and longer, hogs often contract flu and pneumonia, if they continue to sleep out in the open as they have been doing all summer. Cold night rains are especially bad for hogs sleeping out. Each of the little farrowing houses will provide suitable shelter in the field for three to six hogs, states E. T. Robbins, livestock extension specialist, University of Illinois College of Agriculture. The rest of the herd may be well sheltered in a low, open-front shed having a tight roof, back and ends. In fact, he says considerable experience indicates that low sheds open only on the south side are the most satisfactory shelters for hogs in winter. He believes that a low, open-front shed is warmer and drier than the usual high-roofed, tight hog house. Anyway the hogs usually seem contented and healthy when sleeping in a shed 16 feet or more in width, three or four feet high at the back, and five to seven feet high in front. A wide shed may need a two-slope roof to keep the south-side opening low enough for warmth.

(1:30) This year more farmers are depending on electric power than ever before--for milking, pumping water, grinding feed and many other essential farm jobs. That's why it's important that rural electric lines be kept in service without interruption.

Rural electrification engineers say that one of the most common causes of line trouble is thoughtless target shooting at insulators.

Besides being dangerous, shooting at the insulators on high-lines is a good way to help the enemy. In fact just one shot may leave dozens of farms without power for several hours, destroy critical materials and force a rural electric system to spend as much as \$100 or more for repairs.

Even though a careless shot may not seem to damage a line immediately, an insulator may be chipped or cracked. Then, as soon as moisture gets in the crack, the electricity may jump across to the pole, causing an interruption in electric service and sometimes even setting the pole on fire.

Anyway, locating the trouble, particularly on a large system, may take several hours of patrolling--use up precious gasoline and rubber as well as time. Linemen on one rural electric cooperative had to climb nearly 1500 poles recently before locating a dozen scattered insulators, damaged by gunfire.

Of course shooting at insulators is against the law. Just a word of warning is enough for most people. But by keeping watch in their own neighborhoods, and speaking up when necessary, farmers can prevent a lot of line trouble.

(1:15) With the growing shortage of feed, labor and equipment, the best opportunity to keep up and increase egg production is to get more eggs from each hen.

The average six-pound hen in the United States lays only 113 eggs a year and uses about 92 pounds of feed. A hen that lays pretty close to twice as many eggs--a hen that lays 200 eggs a year--may use only about 10 pounds more feed than the poor layer.

Or, to put it another way, that high-laying hen produces about 7 dozen more eggs with only about 10 pounds more feed.

Some breeders in the National Poultry Improvement Plan--as well as other breeders--have bred strains of poultry that lay an average of 200 or more eggs a year.

Poultry specialists point out that with the big demand for poultry, the breeders of these high-producing hens have not been able to meet the demand. They suggest that hatcherymen who want eggs from these high-producing strains should put in their orders right away. And it is none too early for poultrymen to place orders for chicks from these good laying strains. Judging from experience in the past year, a man who orders chicks from these high-producing birds in October for delivery in January or February may not get the chicks until June.

So, order chicks of high egg-laying strains--NOW.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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EIGHTY-SECOND
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 3 3/4 minutes

October 14, 1943

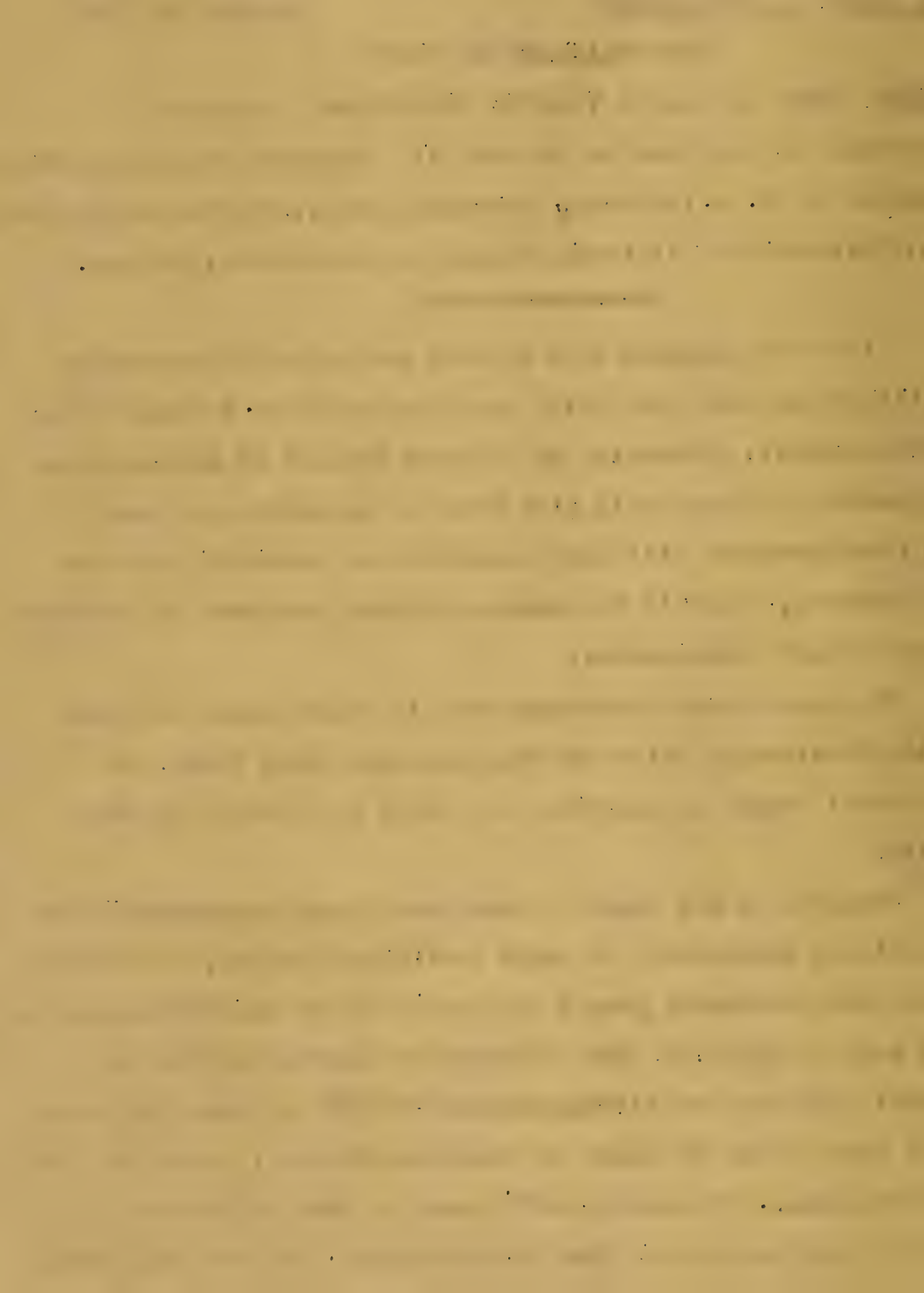
(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:00) No cyanamid will be made available to orchardists for fertilizer purposes this fall, according to V. W. Kelley, extension horticulturist, University of Illinois College of Agriculture. However, ammonium nitrate will give results comparable to those obtained from cyanamid, it's less expensive and naturally a better buy. Furthermore, there'll be ammonium nitrate available in adequate quantities to meet requirements.

The great bulk of cyanamid sold in recent years has been used in the Mississippi Delta and the Louisiana Sugar Bowl. As nearly a normal supply as possible will still be directed to these territories.

Orchardists are urged to make known their requirements for ammonium nitrate immediately to their fertilizer dealers, who should be able to make reasonably prompt deliveries of the quantities needed. You might keep in mind, too, that conditioned ammonium nitrate is approximately 32½ per cent nitrogenous against 20½ per cent for cyanamid. That means about 64 pounds of ammonium nitrate is equal to 100 pounds of cyanamid. Of course, you'll want to make adjustments in your rate of application with that idea in mind. But the main thing right now is to tell your fertilizer dealer how much you'll need.



(:45) Do you have any corn for sale? The processors are looking for about 10 million bushels this month, so maybe some of you fellows can help them out. You know, the War Food Administration has announced it will pay Illinois farmers who sell and deliver corn to country elevators from September 28 through October 31, 1943, any increase that may be made in the ceiling price between the date of sale and November 30.

Products made from corn which are essential in a wide variety of war industries include core binders for foundries, special molds for castings of various metals, nitro starch for explosives, fibrous glass cloth for bomber brake linings, adhesives and containers for shipping ammunition.

You fellows have done a splendid job selling corn in July and August, but keep in mind there's a market for about 10 million bushels right now and it's badly needed.

(:45) It might be a good idea to suggest right here that farmers should keep an accurate record of all sales of milk, cream and purchased feeds in order to qualify for the subsidy payments. You know, a program was recently announced by the War Food Administration whereby all farmers selling milk will receive from October 1 to December 31 a payment ranging from 25 to 50 cents for each 100 pounds of milk sold. Farmers selling cream will receive from three to six cents a pound for butterfat sold. This may influence some farmers to sell whole milk instead of cream. If the payment is calculated on the basis of pounds of butterfat sold, farmers selling cream will receive less than half as much subsidy for each pound of butterfat marketed as farmers selling whole milk. This payment program may bring about an increase in the supply of milk to the consumers,

especially in cities where dealers have not been placed under a quota system for sales. Farmers now selling cream and feeding skim milk should compare the cost of other available protein feeds before making a change.

(1:15) I'd like to call attention to a recent Food Production order issued by the War Food Administration concerning a revision of feeding oil meal to livestock.

The order restricts shipments, sales and inventories and authorizes the Director of Food Production to require the setting aside of about 20 per cent of the monthly production of cottonseed, soybean, peanut and linseed oil meal for distribution as directed by him.

Areas will be designated into which oilseed meals may not be shipped from mills outside these areas where transportation facilities would be conserved and the meals distributed more equitably by making deliveries from mills within the designated area.

The order prohibits the sale of soybean flour and soybean grits for use as feed. Of course, dealers and mixed feed manufacturers are limited to a 15-day supply of meal and cake and feeders to a 30-day supply, as in the original order. The order also provides that no cottonseed processor shall sell or agree to sell in less than carload lots a greater percentage of his total production from August 1, 1943, to July 31, 1944, than he sold in less than carlots during the preceding two years, or 50 per cent of his 1943-44 production--whichever is the greater.

In commenting on the revision of this order, W. E. Carroll, head of the animal husbandry department, University of Illinois College of Agriculture, believes such a plan will aid considerably in a wider distribution of the important feeds. The advanced supply, of course, will be inconvenient in some cases, he says, but can generally be followed without hardship.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

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EIGHTY-THIRD
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 6 1/4 minutes

October 18, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

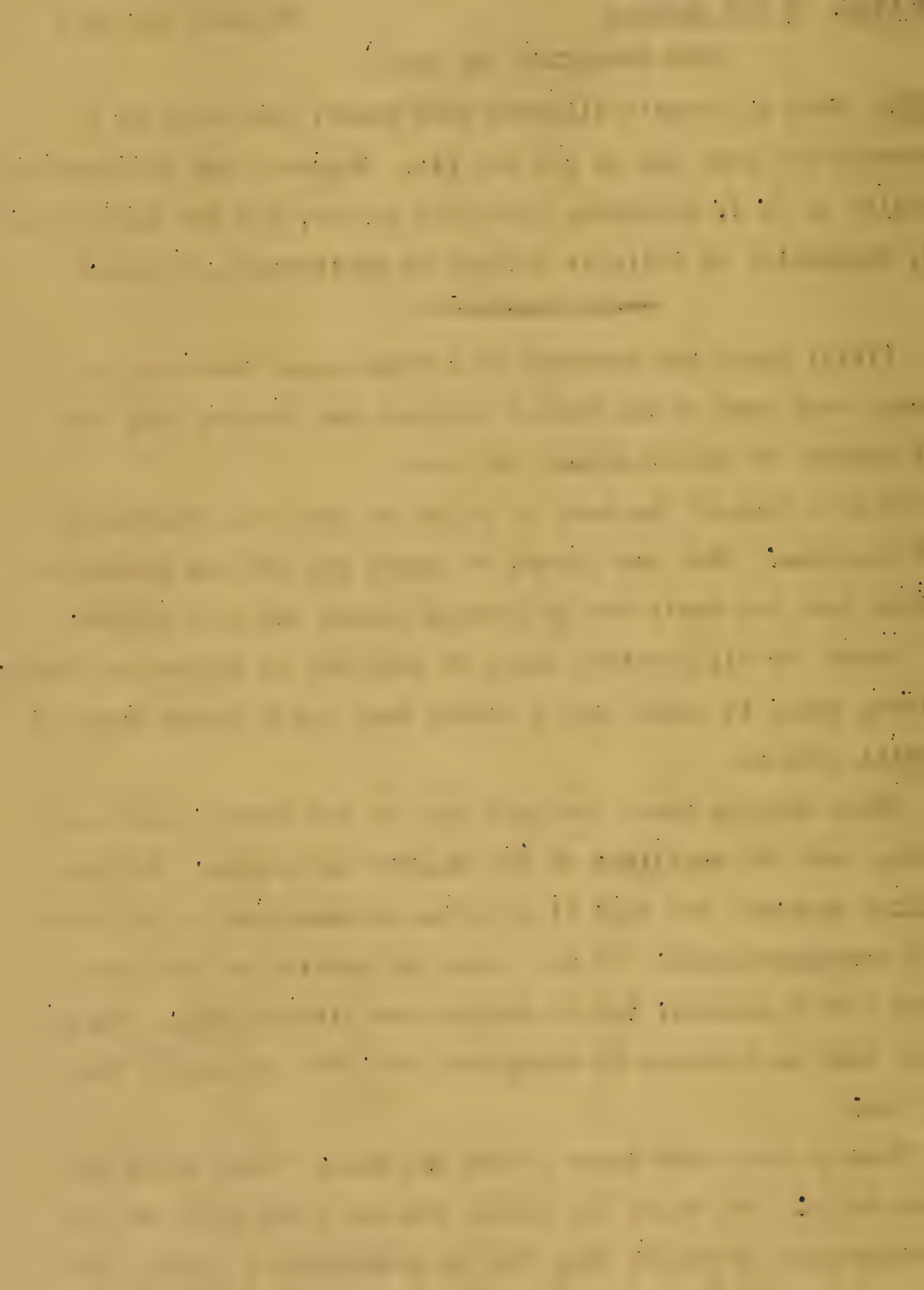
(1:15) Under the pressure of wartime labor shortages on dairy farms, even some of the better dairymen are finding they can still cut corners on chores around the barn.

Draw a plan of the barn to scale and mark the location of tools and supplies. With the layout on paper, you can see places to make savings that you can't see by looking around the barn itself.

Watch for all possible kinds of savings, no matter how small. On a well-run farm, it takes only a minute here and a minute there to make material savings.

Since milking takes the most time of all chores, and comes twice a day, turn the spotlight on the milking operations. If you use a milking machine, see that it is adjusted according to the manufacturer's recommendations. If you leave the machine on each cow longer than 3 to 5 minutes, try to shorten the milking time. And if it takes as much as a minute to strip each cow, try to shorten the stripping job.

Then go over each chore around the barn. Think about the work as you do it. Are there any frills you can leave off? Do you have the right kind of tools? Are they in a convenient place? When you walk to get a tool or put it back, or walk to some place in the barn to do a job, ask yourself how you can save that travel. Any one



or more of several things -- changing the location of the tools, more tools, rearranging the barn -- may save considerable time.

(:45) The more home-grown roughage farmers can provide between now and next crop year, the more livestock they can handle, especially if they run short of concentrates.

In many parts of the northern states, farmers still have time to seed small grain crops to provide grazing during the late fall, winter and early spring. They can plant the small grains alone or in combination with rye grass.

Not only will the grains and rye grass ease the feed shortage and help farmers keep up production of milk and other animal products, but it also will save them money. A survey of 100 dairy farms showed that farmers using fall-sown grains for late fall and early spring pasture saved \$25 to \$100 a farm in barn feeding. Still a further advantage of these temporary grazing crops is that they require less labor than the harvested crops.

(1:00) Now we come to the lousy part of today's program and I'm not speaking figuratively either. It's a note on cattle lice from B. G. Berger, Illinois State Natural History Survey.

Berger says that now's the time to examine your cattle and treat them, if you find any lice. Look around the tail, head, dewlap, brisket, face and withers. You may find any one species or all species on one cow. If they're chewing lice, you'll dust with flowers of sulphur, sodium fluoride or sodium fluosilicate. If they're sucking lice, you can use your leftover victory garden rotenone dust, or wash the animals with a commercial dip. And be sure to follow the directions of the manufacturer.

You know when feeders and dairy cows have lice, a great deal of time is spent in scratching instead of eating. Milk production is decreased and beef animals fail to gain properly. Lice may even seriously retard the growth of calves.

If you're interested in obtaining further information on the control of cattle lice, I have a little leaflet E-447 that's free for the asking. Just address your request to _____. The number again is E-447.

(1:15) Here's something to tack on your dairy barn door, if you're interested in keeping records on cows. It's a feeding chart prepared by C. S. Rhode, professor of dairy extension, University of Illinois College of Agriculture. The chart includes a place for the date, owner, name or number of cow, pounds of milk daily, pounds of grain now being fed daily, amount of grain to feed daily and remarks concerning special feeding directions.

On the other side are rules for feeding such as feeding three pounds of silage for each 100 pounds of liveweight, one pound of grain mixture for each $2\frac{1}{2}$ to three pounds of milk produced daily by Guernseys and Jerseys and so on. There are some suggestions for grain mixtures, too.

In a time like this when feed is scarce and production is needed to be kept at a high level, it's a wise move to make the best use of all available feed. You can check a "star boarder" mighty quick with a chart of this kind and eliminate her from the herd. You may find that some of your good cows could even do better.

Now you fellows in DHIA work know the value of records. I'm talking to the farmer who doesn't belong to that organization and has only a small herd. I'd like to see you have a copy of this

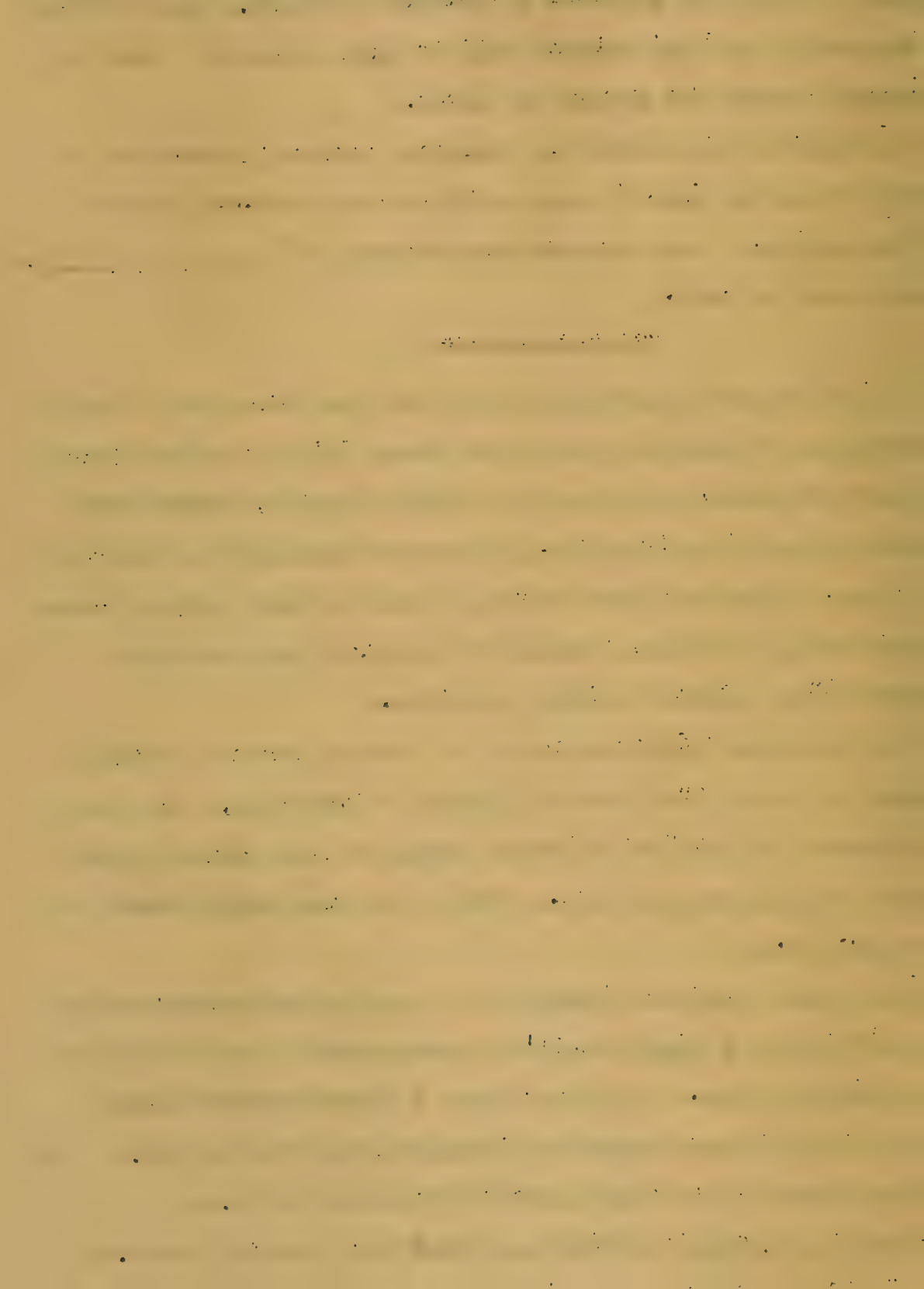


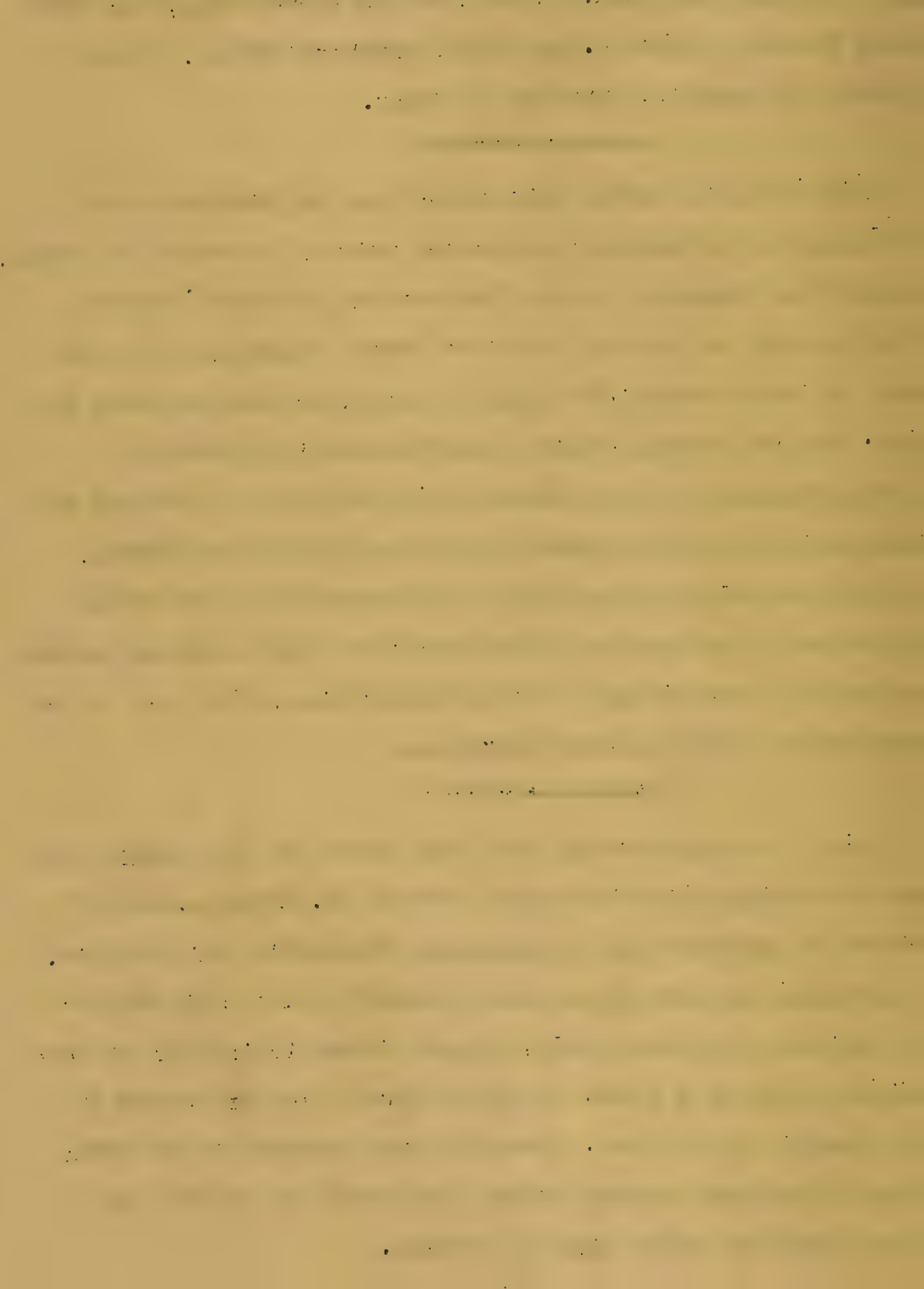
chart and I'll be glad to send you one free for the asking. Address your request to this station. If you have any questions, we'll take them up with Professor Rhode. The chart number is DO-6. I'll be looking forward to hearing from some of you.

(:30) I have a little item here from the University of Illinois College of Agriculture concerning the use of wheat for feed. It looks as if the Commodity Credit Corporation has ruled that no wheat is to be used for feeding hogs for market weighing more than 200 pounds. In other words, the sale of wheat for such purposes is prohibited. Now, of course, county committees will naturally exercise good judgment in cases where it's necessary for farmers to obtain wheat to get thin 200-pound hogs to marketable condition. All wheat sold directly to feed mixers and anyone else for resale to feed mixers shall be used only for feeds for dairy cows and laying hens. You realize this is just good business since we'll want to use scarce feeds to the best possible advantage.

(1:30) Practice safety and avoid accidents in picking corn this season is a suggestion that comes from E. W. Lehmann, head of the department of agricultural engineering, University of Illinois.

Although the corn picker will prevent a lot of backaches in picking the corn crop this fall, because hand-picking corn is one of the toughest jobs on a farm, it will injure a lot of farmers if they aren't careful in its use. Probably more farmers in the corn belt are hurt with corn pickers during the months of October and November than with any other type of machine.

Some of you farmers are using the corn picker for the first time. Whether you are a new operator or have operated one of



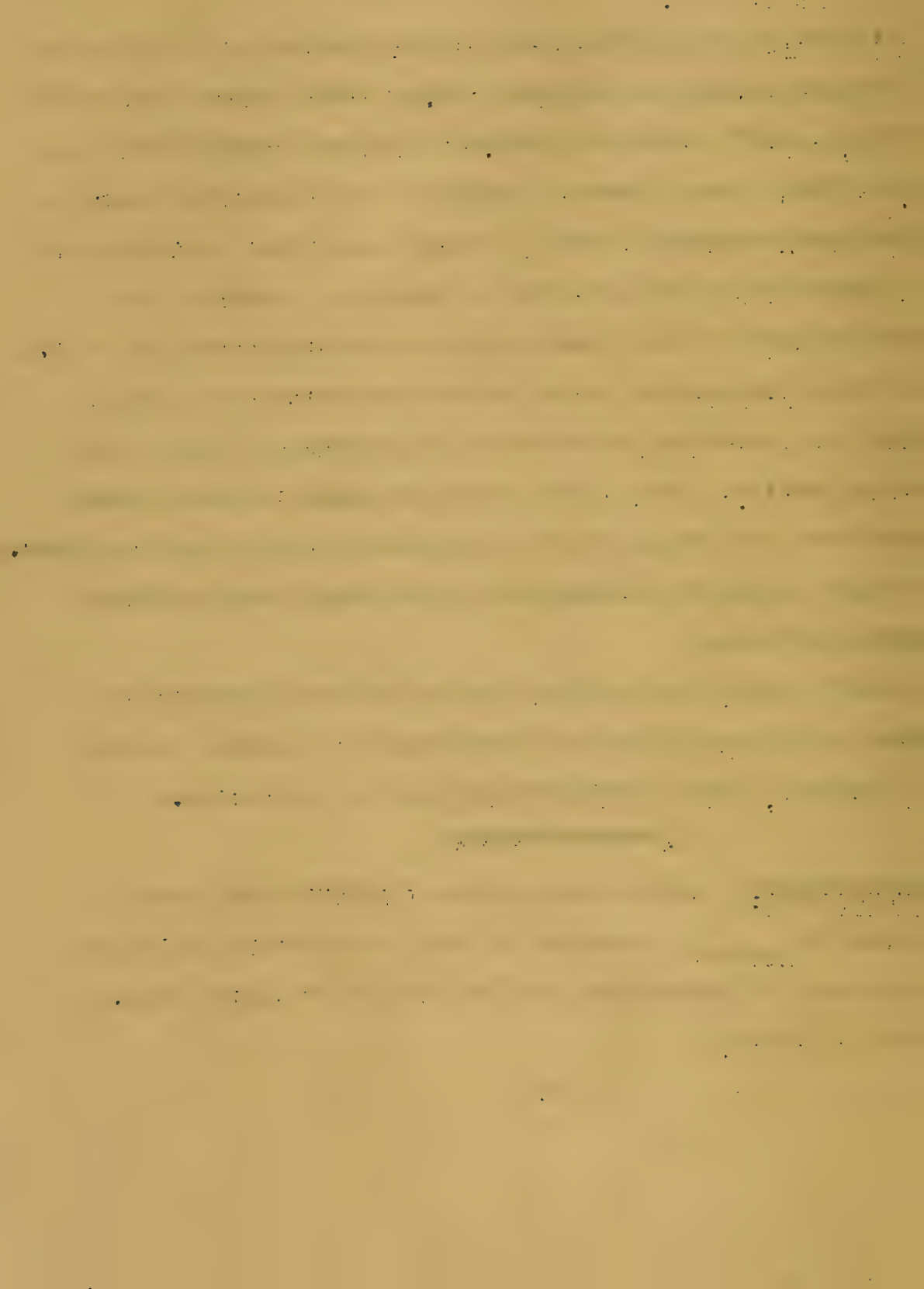
these machines before, don't overlook the dangers involved and be careful to avoid accidents.

Always disengage the tractor clutch and stop the picker in clearing clogged husking or snapping rolls. When repairs and adjustments are made, don't leave off guards. They are provided for your protection. When a power take-off shield is in place, the danger of the rotating power-take-off shaft catching a pant leg is eliminated.

Always follow the practice of stopping a machine when adjustments are made or when lubricating or servicing any part of it. To do this while the machine is in motion may result in a chain or other moving part catching the clothing and drawing an arm or leg into a moving machine. Long, loose coats or baggy clothing result in many accidents and should not be worn when operating such machinery. There is always danger of getting your hands caught when wearing double-thumbed mittens.

Don't forget, an accident during the rush season is as great a loss to the war effort as a man wounded in active military service. Play safe, avoid accidents and keep up production.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.



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Cop. 1
EIGHTY-FOURTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 5:50 minutes

October 21, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

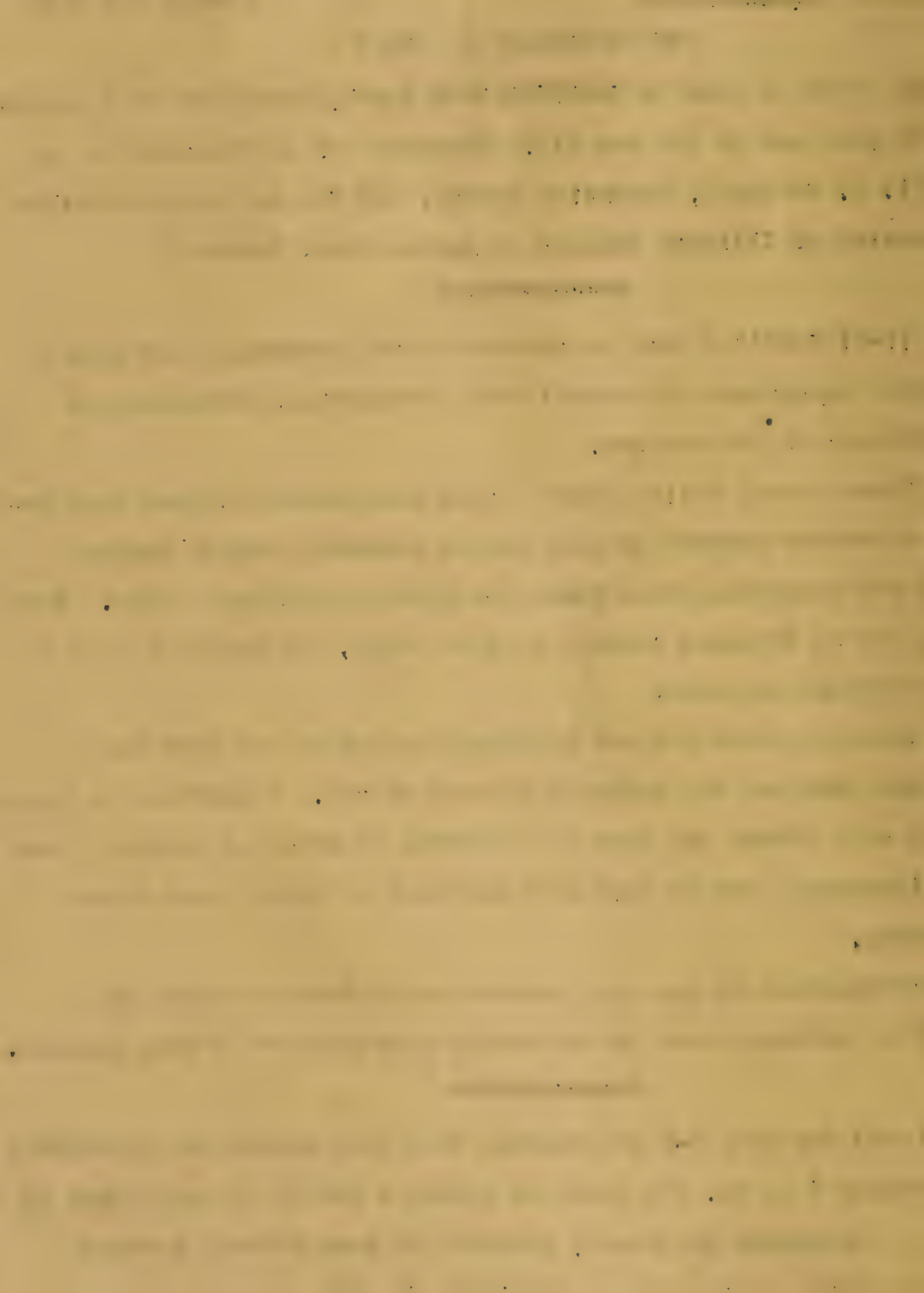
(:45) Here's a note on concrete stock watering tanks from D. G. Carter, department of agricultural engineering, University of Illinois College of Agriculture.

These tanks, built without steel reinforcement, have been designed as a wartime measure to save scarce material, and to enable farmers to get essential water tanks for livestock without delay. Sand and gravel can be obtained locally in most areas, and cement is not a scarce or critical material.

Concrete tanks are not difficult to build, and they are permanent and durable, not affected by rust or rot. A platform or pavement 6 feet wide around the tank is desirable to afford a durable clean place for livestock and do away with mudholes so often found around watering tanks.

Information on building nonreinforced concrete tanks and troughs may be obtained free by addressing your request to this station.

(:45) Now with 4-H Achievement Week just around the proverbial corner, November 6 to 13, I'm going to insert a couple of highlights of 4-H activity throughout the state, courtesy of Mary Osborne Hubbard, 4-H club specialist, University of Illinois College of Agriculture.



Woodford county has 101 more girls in 4-H work this year than in 1942. Incidentally, that all but doubled the enrollment, as the total now is 247.

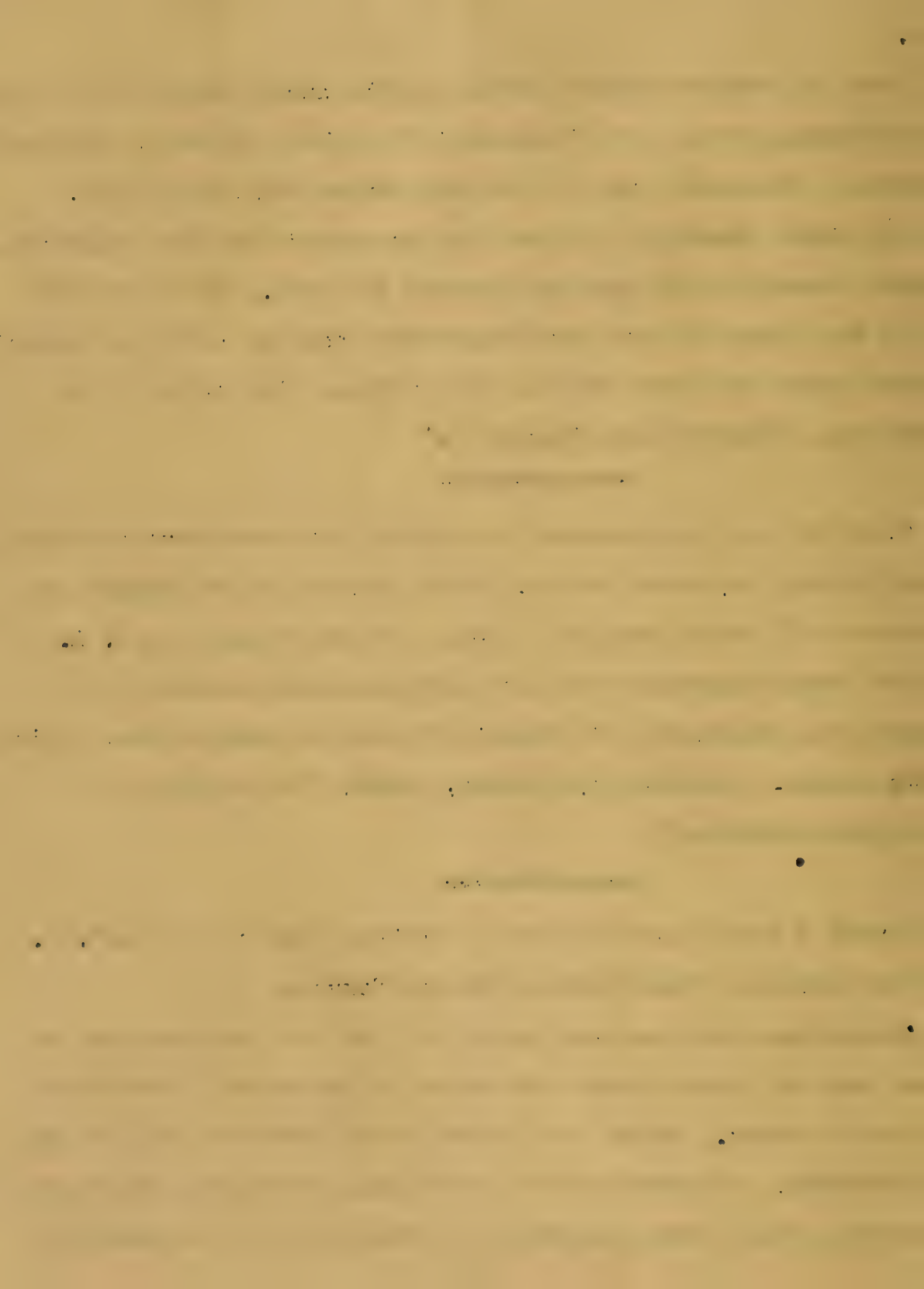
Down in Crawford county members of the Lucky Clovers Club, led by Mrs. Iola Akeman, seem to be "cashing in" on their dramatic ability. They presented a three-act play at the home church and cleared \$22. Spurred on by their financial success they presented the play again at the Annapolis community building and cleared \$20 more. They gave \$20 to the local Red Cross, \$5 for servicemen's kits and the rest was donated for Christmas boxes for local boys in the service. The title of the play, by the way, "Sister Susie Swings It."

(:20) If you're interested in finding out more about the milk records for Milking Shorthorn cattle, you'll find a lot of answers to your questions in Illinois Bulletin 4-9-8. It was prepared by W. L. Gaines of the dairy department and has just been made available for publication by the University of Illinois College of Agriculture. It's free for the asking. Remember the number, 4-9-8, "An Analysis of Milking Shorthorn Records."

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(1:00) I have a little item on clothes moths here from B. G. Berger, of the Illinois State Natural History Survey.

Berger says to clean and mothproof, use two teaspoonfuls of neutral soap and one tablespoonful of sodium or magnesium fluosilicate in each gallon of water. Spray both sides of all rugs and apply to upholstered furniture. Be sure that the water will not damage the furniture or discolor it by first applying to a small area and allowing it to dry.



You know moths feed on dirt and lint hidden behind baseboards and picture molding. These dirt-filled cracks found in the home should be sprayed during housecleaning with a good household fly spray or mothproofed with the leftover solution used to mothproof the rug. To be safe it is necessary to mothproof every year or two because ordinary housecleaning operations remove the water-soluble chemical.

We have a free circular on clothes moths, No. 473. If you'd like a copy, address your request to _____. That's No. 4-7-3.

(:45) One farmer in every four on the lines of REA-financed Southwestern Electric Cooperative, Greenville, now milks his cows with an electric milking machine, according to a report to the University of Illinois College of Agriculture from V. C. Kallal, project superintendent.

The cooperative reported 500 electric milking machines on its system. One hundred of these machines have been installed in the past year. The cooperative furnishes electricity to nearly 2,000 Illinois farms, in an area extending from Madison county east to Effingham county. Included in this area is some of the heaviest fluid milk-producing territory in the St. Louis milkshed.

REA-financed rural electric cooperatives supply electric service to some 8,000 Illinois farms in the St. Louis milkshed. The cooperatives report, in addition to using more milking machines, farmers on their lines also are making increased use of milk coolers, water pumps and other electrical appliances which help produce quality milk with less labor.

(:45) If you're interested in plans for self-feeders, movable hog houses and handling equipment for your 1944 spring litters, you'll want a copy of circular 552 on hog production equipment. I mentioned it last spring, but it's just as much in style now as it was then. For instance, here's a single-unit Illinois sunshine house, 7 feet by 8 feet, an A-type utility house with several possible variations, a "flat top" and the very popular "War Winner" hog house. There are illustrations for a mineral supplement box, an ear corn hopper feeder and electric pig brooder and, as the public auction would list it, a number of others too numerous to mention.

This circular, written by D. G. Carter, Department of Agricultural engineering, University of Illinois College of Agriculture, contains an illustration and a brief description of these labor-saving pieces of hog equipment. The circular is free for the asking. Just address your request to this station. Remember the number--circular 5-5-2.

(1:30) Electricity has gone a long way toward cutting down farm fire losses. But carelessness in using electricity can still cause a blaze which will work for the Axis in a big way.

Such carelessness may destroy war-vital buildings, equipment, livestock and food.

One of the most important rules to remember, agricultural engineering specialists say, is that all new wiring or wiring changes must be inspected. And don't tamper with fuses. When a fuse burns out, replace it with a new one of the proper size.

Next, keep your wiring and equipment in good repair. But don't try to make repairs yourself unless you know how. Call a good electrician.

Bulbs produce a great deal of heat. So keep hay, chaff, rags and other combustible materials away from lights in barns and other farm buildings. Bulbs in very dusty rooms such as those where feed is ground should be enclosed in glass globes.

Don't connect more than one piece of heavy equipment or two pieces of light equipment from the same outlet. Use extension cords sparingly. Then be sure not to run them under rugs, through doors or to hang them over nails. Keep them away from plumbing, radiators or any grounded pipes.

Finally, if you have a pressure water system, it's a good idea to keep a garden hose where you can get it in an emergency. Drenching a little blaze right away may prevent a big fire. But just one word of warning. Don't turn a hose on electric wiring or equipment until you've turned off the electricity. I'll repeat that. Disconnect the appliance or open the main switch before you use the hose to put out an electrical fire.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

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EIGHTY-FIFTH

ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture

Speaking time: 5:15 minutes

October 25, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(:45) Pigs and prosperity have been going along together in 1943, as you know. And if swine growers are anxious to get the same best combination in 1944, they'll see that litters are farrowed early. It's like this. I picked up an item from E. T. Robbins, livestock extension specialist, University of Illinois College of Agriculture, that states the floor price on hogs will be lowered \$1.25 on October 1, 1944. That means, if we want to take full advantage of this floor price of \$13.75 which exists now, we'll have to farrow pigs in late winter or early March and finish them off at 200 pounds in about six months.

Robbins states that there isn't any probability that too many early pigs will be raised, but there's danger of the country producing an excessive number of late pigs. So he suggests a return to earlier farrowing of the spring pig crop. Many new hog houses were built this past spring and can be used as farrowing quarters.

Only the pigs which are born before next April stand a good chance to reach market size and finish before the government support price for hogs is lowered to \$12.50 a hundredweight next October 1.

(1:15) If you're wondering whether or not you should apply limestone and rock phosphate at the same time, the answer is "yes,

if it's more convenient," according to C. M. Linsley, soils extension specialist, University of Illinois College of Agriculture. Of course, there are a few restrictions that go along with this general statement.

In the first place where limestone is applied in excessive amounts, that is, two tons or more in excess of that called for by soil acidity tests, the effectiveness of rock phosphate may be decreased considerably for a number of years. This isn't likely to happen, however, since few of us apply more limestone than is needed. Besides, this possibility of applying too much limestone and thus decreasing the effectiveness of phosphate can be avoided by merely testing for acidity.

Where limestone and rock phosphate are applied at the same time and disked in together ahead of wheat, the availability of phosphorus and rock phosphate also may be lessened for the first wheat crop, Linsley says. However, it will only last about two or three years. There is no noticeable similar effect with alfalfa, red clover or sweet clover.

It all boils down to the fact that if limestone and phosphate are to be applied together, test the soil for acidity first and don't apply too much limestone.

(:45) It's a good time to make a deposit at the National "Scrap Bank" right now. Furthermore, the interest rates are high-- freedom from want and fear, freedom of speech and freedom of worship. The National Scrap Bank Campaign is open for business until November 15, and is out to obtain total assets of about 15 million tons of scrap iron before the end of the year. So cash in your old binders, worn out corn cultivator shovels, broken horseshoes, the remaining remnants of the running gears of a baby buggy or anything else that's iron.

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We're out to build an "ever-normal granary" of scrap in every community. Then if a strike comes along or a serious transportation tie-up develops, the ship builders, airplane manufacturers and munition makers will be assured of enough steel when it's needed.

The Extension Service in Agriculture and Home Economics, University of Illinois College of Agriculture is cooperating with the county war boards in giving their fullest support to this victory scrap campaign. For further details of the collection in your own community, see your farm adviser or any other member of the county war board.

(1:30) This year farmers got more chemical fertilizer than ever before.

For the coming year they can get 10 to 12 per cent more fertilizer than this year's record, provided they order and accept it now instead of waiting until spring.

The fertilizer manufacturers have been using supplies of raw materials for manufacture of mixed fertilizer for next season's use ever since the first of July. With the all-time record demand for fertilizer coming on top of the huge war needs for munitions, the manufacturers simply have to spread their manufacturing over a longer season than in normal years. With the shortage of labor, they can't count on going out and rounding up extra workers to take care of a flood of last-minute orders in March and April. Neither do they have the storage space to build up enough supplies to take care of all farmers' needs if farmers wait until spring. Neither will they be able to get the railroad cars to move all the fertilizer they can supply if farmers delay their orders. So the War Food Administration urges farmers to start right away to make applications, order and accept delivery of mixed fertilizers for next spring's crops.

1. The first part of the paper is devoted to the study of the

properties of the function $f(x)$ defined by

$$f(x) = \sum_{n=0}^{\infty} \frac{a_n}{n!} x^n$$

where a_n are the coefficients of the power series

$$A(x) = \sum_{n=0}^{\infty} a_n x^n$$

which satisfies the differential equation

$$x A'(x) = A(x)^2$$

with the initial condition $A(0) = 1$.

It is well known that the solution of this equation is

$$A(x) = \frac{1}{1-x}$$

and therefore the function $f(x)$ is equal to

$$f(x) = \sum_{n=0}^{\infty} \frac{1}{n!} x^n = e^x$$

for all x . This result is well known and it is not

surprising that it can be obtained in a very simple

way. However, the purpose of this paper is to

show that the function $f(x)$ is also equal to

$$f(x) = \sum_{n=0}^{\infty} \frac{1}{n!} x^n$$

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Farmers can readily store their mixed fertilizer over winter. The important thing is to store it in a dry, weather-proof building with a dry floor in it. Or, if the building doesn't have a floor, put in a raised platform. And one further point--don't store the sacks more than 8 or 10 deep.

The extra fertilizer farmers can get for next year's crops by ordering now will more than pay for the trouble of storing it over winter on the farm.

(1:00) I have a little note here from the department of animal pathology and hygiene, University of Illinois College of Agriculture on white snakeroot poisoning.

Ordinarily animals won't eat white snakeroot. But following drought conditions, or when pastures are short, they'll eat most anything they can find. So we'll want to be on the lookout for white snakeroot in our pastures, especially in wooded sections along Illinois streams.

Incidentally, white snakeroot is a slender, erect perennial herb which grows from one to five feet high. The leaves are opposite each other, three to five inches long, broadly ovate and have sharply toothed edges. Small white flowers appear as compound clusters in the late fall. By the way, if you're in doubt in identifying the plant, cut the top of the stalk with leaves and flowers still attached in a box and mail it to me. I'll let you know whether or not it's white snakeroot.

In case you're wondering just why we're so persistent about eradicating white snakeroot from pastures, you'll be interested to know it's a plant that causes milk sickness in man and "trembles" in

farm animals. Of course, no humans are going to eat white snakeroot, but they may eat the meat or drink the milk from an animal that has been poisoned by white snakeroot. So let's exercise extreme care in keeping food producing animals away from fields where white snakeroot grows.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

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EIGHTY-SIXTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 5 minutes

October 28, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:15) Illinois farmers are to be congratulated for some mighty fine work that's been done along the line of control of brucellosis in cattle--commonly called contagious abortion or Bang's disease. Now, however, we can "train our sights" on the same thing for hogs. You know, an increase has been reported in losses due to brucellosis in swine.

The department of animal pathology and hygiene, University of Illinois College of Agriculture has a demonstrational project on the control of brucellosis in swine. The project is open to any purebred breeder in the state. Samples are tested without charge and herds are accredited on the basis of two annual negative tests.

Suspected animals should be blood tested and removed from the herd if found to be reactors. Sows having given birth to dead pigs should also be separated from the herd even though they fail to react to a blood test. All boars should be tested, since it's quite likely they're the major source of infection. Pigs at weaning time can be removed to clean quarters and kept isolated from adult animals.

Brucellosis organisms that attack swine are capable of causing undulant fever in man. Farmers with cuts on their hands are cautioned to exercise care in handling animals at farrowing time.

For further information on the tests carried out at the University of Illinois College of Agriculture, address this station.

U.S. AIR FORCE (1947-1948)

OFFICE OF THE SECRETARY OF THE AIR FORCE

WASHINGTON, D.C. 20330

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(1:00) Here's a note on wood roaches from H. B. Petty, extension entomologist, Illinois State Natural History Survey.

Many people bring into their homes wood for fireplaces and for furnaces at this time of year. Often this wood is old, decaying wood that has been laying around in groves of trees, orchards and vacant lots for some time. While it was in this condition, it became infested with wood roaches.

Now wherever this wood is stored about the house, wood roaches sometimes build up populations. In addition, houses built in wooded areas are often infested with these roaches.

When wood roaches become established, they do not limit their travels to firewood but wander around the house. When they get into food it is as much an accident as anything else. Nevertheless, it becomes very annoying to see them scurrying about, even though they are not pests in the same sense of the word as is the German cockroach, a common pest in and about kitchens and pantries.

This wood roach is two-thirds of an inch in length. The male is equipped with long wings and the female with very stubby wings and can be distinguished by the light margin at the base of the wings. Often the infestation is only by males, as they are attracted to lights, and after they die you see no more of the wood roach.

Methods of control are similar to the control of other roaches, that is, the use of sodium fluoride or phosphorous paste. After the decaying wood has been burned, the trouble usually ceases.

(1:15) Here's a little note on hays for hogs I picked up from J. L. Krider, assistant professor of swine husbandry, University of Illinois College of Agriculture.

Liberal amounts of legume hays in swine rations are economical, Krider states, and insure against possible vitamin deficiencies. Since we can't usually feed our hogs on pasture 12 months of the year in northern latitudes, legume hays and meals become our second choice.

Sows fed on alfalfa hay in a rack in drylot produced as strong and as large litters as similar sows fed on rye pastures, when the same grain mixture was used.

Gilts fed a 12 per cent alfalfa hay in a concentrate mixture which contained meat proteins weaned 10 times as many pigs as similar gilts that received the ration without the alfalfa in continuous drylot tests.

For gilts during gestation and lactation in drylot about twice as many pigs were weaned when 10 to 15 per cent alfalfa meal was included in a high plant protein ration as when only five per cent alfalfa meal was used.

For growing-fattening pigs, as well as breeding stock, Krider says that the quality is more important than the kind of hay that's used. Alfalfa, red clover, soybean, lespedeza, cowpea and field pea hays all give satisfactory results if the quality is good.

He points out that if home-mixed protein supplements are used to self-feed free-choice with corn and minerals, 25 to 33 per cent of high-quality ground alfalfa or other legume hay should be included in the supplement.

Since high-quality hays for hogs pay dividends, tag some of that green, leafy hay now for your brood sows and growing pigs this winter.

(1:30) Illinois farmers did such a grand job of producing food for freedom in 1943 that they're being called upon to "turn the



trick" again in 1944. If they can attain the goals set for them in the production of food, feed and fiber, the supplies for civilians will be about like they are now. Something like twenty-five per cent of the total national production will go to lend-lease and the armed forces, while civilians will receive the other seventy-five per cent.

Staff men at the University of Illinois College of Agriculture point out there will be a few minor shifts in the production program next year. One of the most pressing problems is the adjustment of livestock to prospective feed supplies. Five per cent less feed is expected for each animal unit next year as compared to the present 1942-43 season.

Suggested county production goals have been set up in a way to encourage maximum continued production in all areas. However, right now we can only give you an idea what these goals are for the state on a percentage basis. Wheat acreage up 30 per cent; hemp, 14; soybeans for beans, 14; hens and pullets on farms, up 16 per cent; truck vegetables, 2; corn, 3, and eggs, up 4 per cent. If you forget what production figures were a year ago, let's take a look at a few of these percentages translated into acres.

Illinois farmers produced about 8,748,000 acres of corn in 1943. They're being called upon to produce 9,000,000 in 1944. Likewise, they're being called upon to produce 500,000 acres more of soybeans for beans. Milk production will be something like 5,299,000,000 pounds this year. It's set for 5,540,000,000 in 1944. Eggs produced in 1943 will be about 223,417,000 dozen. Nearly 9,000,000 dozen more are requested for 1944. About 2,538,000 less chickens are outlined to be produced in 1944. Cattle is about the same, while hogs and sheep are down.



Whether or not farmers can reach these all-time goals depends on a number of factors. Labor for one. Weather's another. And following the recommendations for more efficient farming outlined by the University of Illinois College of Agriculture in its suggestions for better varieties, improved practices and management will be another factor in attaining production goals for 1944.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Speaking time: 3:15 minutes

November 1, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:00) With less feed for more livestock this winter than last, poultrymen can afford to keep only the younger, thriftier hens with good laying records. The old hens will have to go -- that is, all but the very best of the old hens. With the molting season already under way, many of the old hens will eat their heads off for 90 days before they start laying again. On the other hand, the better pullets will lay well through the coming year without letup. A year from now, the pullets will have 15 per cent more eggs to their credit than the old hens, at less feed cost per dozen. So, with some culling in order, let the older hens go first.

Some poultrymen have another good reason to get rid of the layers that have passed their prime. Some poultrymen are short of laying house space. Unless they get rid of some of the old birds, they will have to mix old hens and pullets. That's bad -- because the older birds spread disease to the younger ones and cause heavy death losses.

Poultry specialists estimate many poultrymen can get rid of 10 to 15 per cent of their hens -- and still produce as many eggs as they did during the past year.

So, go through your flock and cull out the poor layers -- that is, the birds with pale, shrunken combs -- and bright yellow shanks.

(1:00) In some parts of the country, the poultry feed situation is now the reverse of what it was during the first World War. Before that war, wheat was a highly popular feed for poultry flocks.

As supplies got tight, and as prices of wheat went up, many poultrymen shifted from wheat to corn. Chickens like yellow corn, high in vitamin A. It gave good results...so poultrymen stuck to it.

But now corn is short and various regions still have fair supplies of other grains. For example, poultrymen in the Northwest can get feed wheat, those down the West Coast can get barley, poultrymen in the Southwest can get grain sorghums, and various sections have lots of oats.

Poultry specialists point out that poultrymen in those parts of the country can very well shift from corn to some of the other grains.

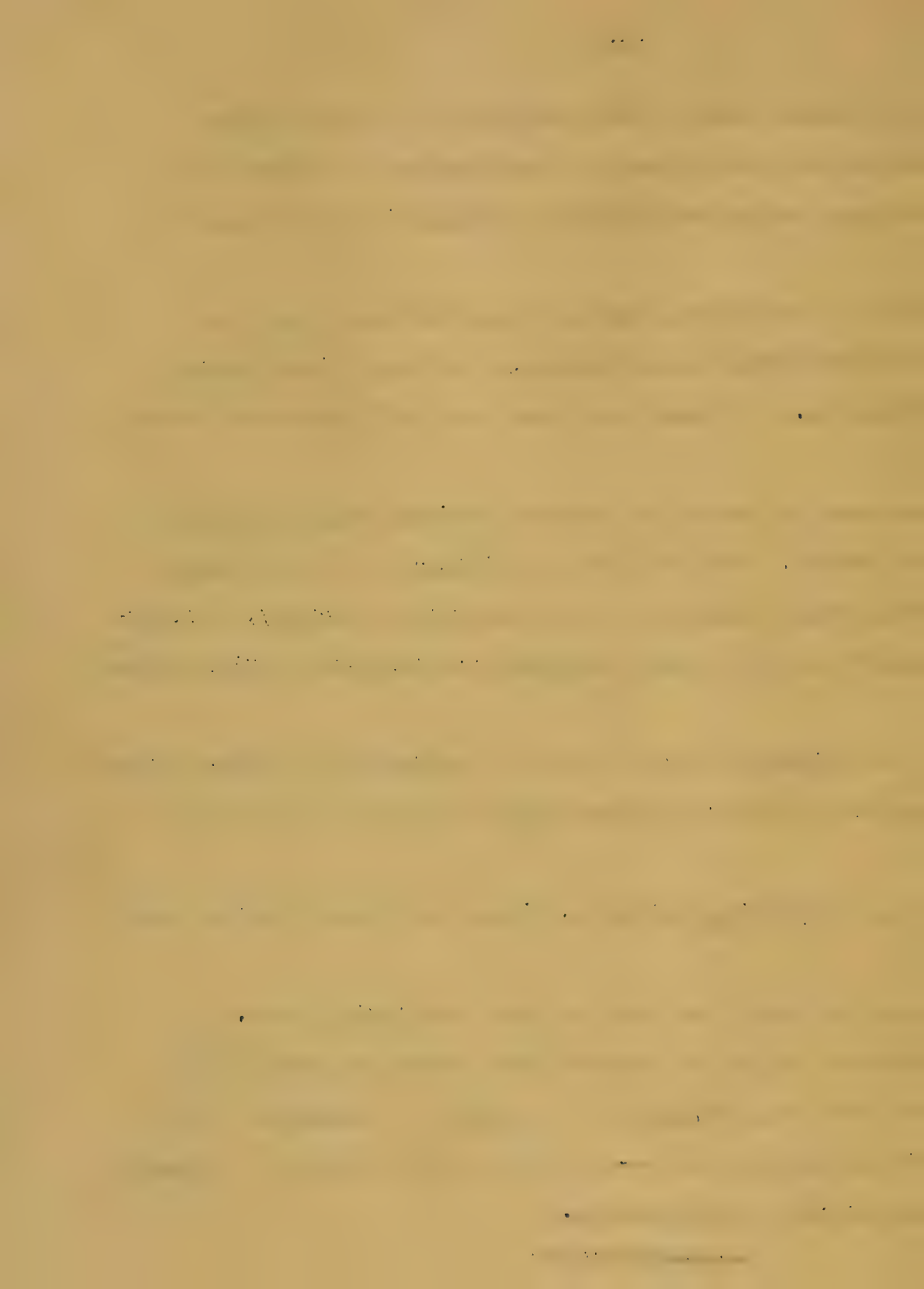
In fact, for growing chickens, wheat is often a better feed than corn.

And wheat is nearly as good as corn for laying hens.

The important thing in substituting wheat and other grains for corn is to see that the chickens get plenty of vitamin A. See that they have either green feeds -- or good cured, ground-up legume hay -- or special vitamin A supplements.

(1:15) This is the biggest potato year on record -- but the outlook is for a still bigger potato crop next year.

When all the diggin's done, it is estimated that potato growers will have harvested about 24 per cent more potatoes than last year -- the largest total supply in history. They had a much bigger



acreage than usual -- nearly a fourth more than last year --- and they got about the same yield to the acre as last year.

But although the crop is big -- the need for potatoes is big, too. Military and lend-lease requirements are going up, and so is the demand for seed potatoes to plant the larger acreage needed next year. And although civilians in this country will have about 10 or 15 per cent more potatoes per person than last year, the economists think the record-breaking supply may not prove enough to meet the demand for potatoes. There are both ceiling and support prices for potatoes.

A further increase in both the military and civilian demand is expected. The department estimates that potato growers will need to plant about 2 per cent more land in potatoes next year than they planted during this record-breaking year. With average yields, even with the extra acreage, the supply of potatoes for civilians in this country will run a little less than the big supply of this year.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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EIGHTY EIGHTH

ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture)

Speaking time: 5 minutes

November 4, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(:45) Here's a note on a cattle sale held under the auspices of the Illinois Shorthorn Breeders' Association. The show will be held in the stock pavilion at the University of Illinois College of Agriculture on Tuesday, November 9. It will begin at 12:30 and will be preceded by a show starting at 9:30. Fifty-seven animals, "tops in their breed," have literally been drafted from 22 of the best Shorthorn herds in the state. There will be 25 bulls and 32 bred females. There's no need to worry about transportation costs on these cattle. It isn't every day in the week that Shorthorns like these are worth whatever extra expense is involved in transportation. So try to attend the Illinois "Victory" Shorthorn show and sale on Tuesday, November 9, at the University of Illinois.

(1:30) This winter, our farmers will draw on the feed bins of other countries in the Western Hemisphere to maintain their record numbers of livestock and poultry.

If our government and private concerns can get the boats and freight cars, they expect to import as much as 200 to 300 million bushels of grain this fall and winter. That will be only a small fraction of our own production, but it will help farmers on the East and West Coasts, in the Southeast, and in other localities where feed is short.

Already the War Food Administration has bought in Canada about 10 million bushels of wheat to come into the Northeast, 8 million bushels for the Middle Atlantic and Southeastern States, and 2 million bushels for the Rocky Mountain area and California. In addition private concerns have been bringing 4 to 8 million bushels of Canadian oats and barley a month into the Northeast. With corn short in the Northeast, Northeastern farmers are mixing wheat with oats and barley to improve the feeding quality of the wheat.

In addition to the grain from Canada, the government has bought 50 thousand tons of wheat, and 12 thousand tons of barley from Argentina. This wheat and barley will move up to the Gulf and Atlantic Coast ports as soon as officials can find the ships to haul it.

Besides the grain actually brought in from outside the country, several more million bushels of wheat a month are in sight for livestock feed as a result of steps to shift East Coast distilleries from grain back to molasses.

But, in spite of these and other steps to provide more feed, we will still have trouble feeding the record herds and flocks now on farms.

(1:30) Many a dairy cow, laying hen and pig is feeding these days on protein from farm corners of the world.

Even though boats are hard to get, government agencies are reserving boat space to bring in every pound of animal protein they can get in friendly countries in order to supplement our home-produced supplies and to provide supplements for a greatly increased livestock population.

American farmers are now feeding tankage, liver meal and other animal products from Argentina, Uruguay, Brazil and Cuba--and from such faraway places as Australia and New Zealand.

We may import even more dry rendered tankage this year than in some normal years before the war. In fact, our imports of tankage may make up 10 per cent of our total supplies. And we may import more liver meal than ever before.

In addition to the animal proteins, we are importing a wide variety of vegetable proteins. The buying of about 50 thousand tons of cottonseed meal, largely from Brazil is reported. Large amounts of castor beans coming in from Brazil and other Pan-American countries for use in fertilizer will free more cottonseed meal for livestock feed. We're getting some peanuts, soybean meal and rape and sesame seed from the other Americas. And from Ceylon and French Oceania all the way across the Pacific, we're getting copra meal that used to go to France and England. It is now being shipped to our East and West Coasts under United Nations agreements to share materials. In spite of shipping difficulties, we are importing about as much vegetable protein as we ever did.

However, even with this big help from abroad, we will still have to budget our protein feeds pretty carefully to feed our record numbers of livestock and poultry.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 3 and June 30, 1914

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EIGHTY-NINTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture

Speaking time: 2 1/2 minutes

November 8, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to F. J. Keilholz, extension editor, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(:45) Illinois farmers are cautioned to be on the alert for "cornstalk" disease in cattle. Animal pathologists at the University of Illinois College of Agriculture point out that this disease usually occurs soon after cattle have been turned into fields to pasture the cornstalks. The exact cause of the disease is unknown but its effects are rapid and often fatal. Symptoms of cornstalk poisoning are muscular trembling, convulsions and prostration. Prompt treatment of affected animals by a veterinarian may reduce the number of deaths, but even then the loss may be high.

For some unexplained reason, it seems that "cornstalk" disease is less likely to occur when stalks are broken down. And here's another practice that's followed by some cattle owners to check the safety of the stalk field. Allow only one or two of the less valuable animals access to the field for several days before turning in the bulk of the herd.

(1:15) Here's a feature event that should be marked "must attend" on your schedule for future appointments. It's the thirty-second annual "mum" show which will be held in the floricultural greenhouses on the campus of the University of Illinois College of Agriculture, November 13 to 16 inclusive, Saturday through Tuesday.

THE UNIVERSITY OF CHICAGO
DIVISION OF THE PHYSICAL SCIENCES
DEPARTMENT OF CHEMISTRY

REPORT OF THE COMMITTEE ON THE PROGRESS OF THE WORK

FOR THE YEAR 1900

PRESENTED TO THE BOARD OF THE UNIVERSITY OF CHICAGO

AT THE ANNUAL MEETING, 1901

BY THE COMMITTEE ON THE PROGRESS OF THE WORK

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BY THE COMMITTEE ON THE PROGRESS OF THE WORK

FOR THE YEAR 1900

Doors will be open each day from eight to five, and there's no admission charge. H. B. Dorner, chief in floriculture, who originated the "mum" show and has been in charge of each one, will be on hand to welcome you, as will S. W. Hall, J. B. Wingert and F. F. Weinard of his floricultural staff. You'll see eight thousand individual plants at the show--yellow, bronze, red, white and lavender. Of these, 2400 are the large flowered sort which measure six to nine inches across. Many of the plants have been developed by the students in floricultural class work and have never been released to the trade. We're certain you'll enjoy this year's "mum" show and we hope you'll be able to make plans to attend. Remember the dates, November 13 through November 16, and the place, the University of Illinois College of Agriculture in Urbana-Champaign.

(:30) Monday, November 15, is the deadline date for filing loss claims in the wheat crop insurance program. As you probably know, in case a loss is claimed, the insured is required to submit a statement in proof of the loss to the office of the county AAA committee, not later than 30 days after threshing, but in no event later than November 15, unless the time is extended in writing by the Commodity Credit Corporation. Proof of loss statements filed after November 15 must be accompanied by a memorandum signed by the adjuster and a member of the county committee setting forth an explanation of the facts concerning the delay. So if any of you growers are going to claim a loss in the wheat crop insurance program, we'd suggest you see your county AAA committee before Monday, November 15.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

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NINETIETH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(United States Department of Agriculture

Speaking time: 2:35 minutes

November 11, 1943

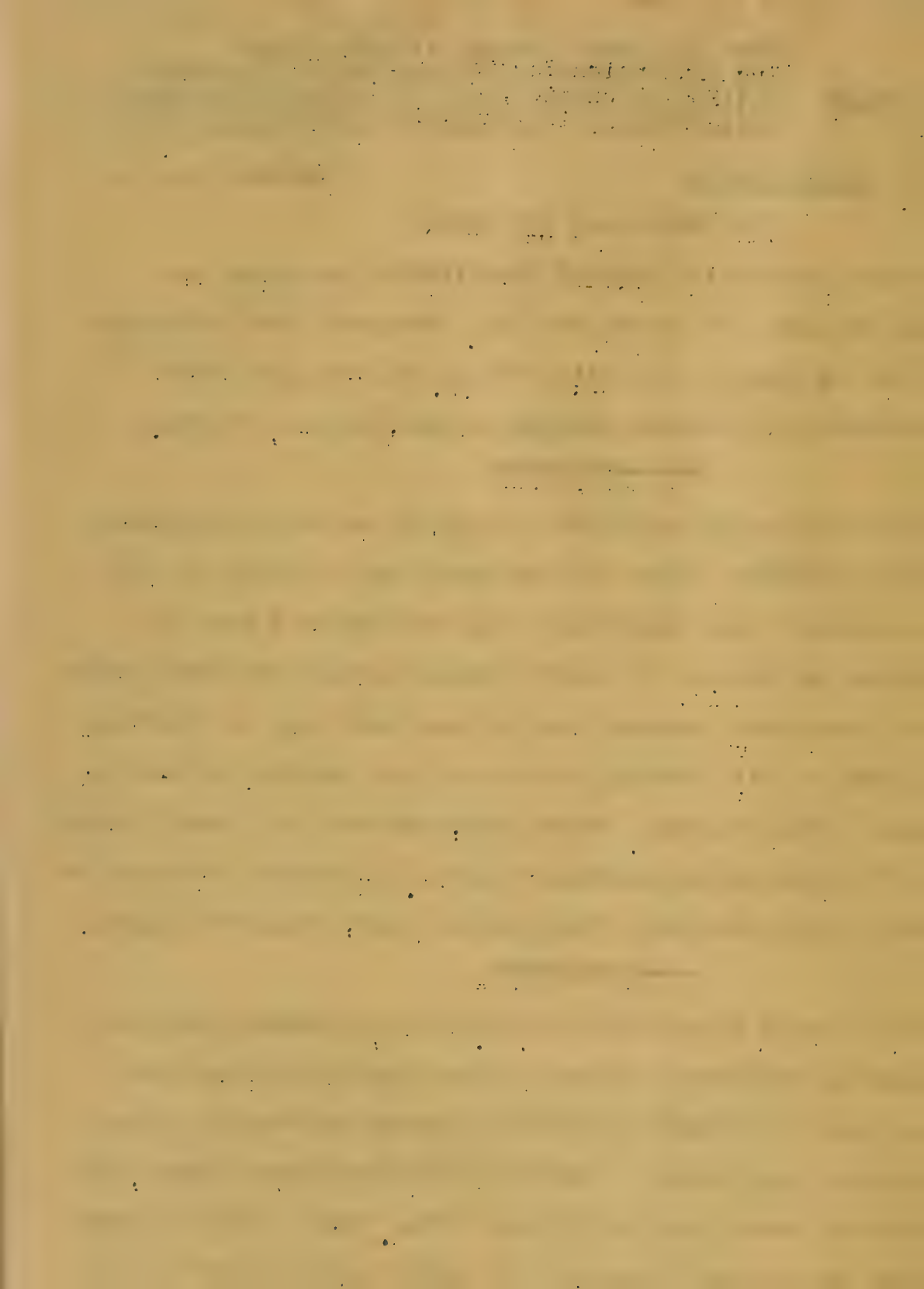
(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to Extension Editor's Office, 105 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(:30) It's really patriotic for all of us to do everything we can to avoid accidents. They tell us every hour of work we lose because of an accident that could have been avoided is a step of retreat from Japs and Nazis. If you're working around the corn picker this afternoon, tuck your trouser legs in your boot tops or tie them at the bottom with a twine string; button up that jacket, and tuck in the extra thumb on your mitten. There isn't any need of "being dressed up fit to kill" around moving machinery parts. If someone is bound to get hurt, make up your mind that that someone isn't going to be you.

(1:00) Here's a note from H. B. Petty, extension entomologist, on insects in firewood. You may wonder where that waspish-looking beetle came from that was crawling across the rug the other day. You may have some firewood stored in the house some place, and chances are this is where the beetle came from. Many different trees are infested by borers, each species of borer being a pest of a specific variety of tree. There are various apple borers, poplar borers, elm borers and locust borers, as well as many bark beetles.

The most noticeable one of these is the locust borer, which is bright colored. The basic color is black, but there are bright yellow cross lines on its back. Many people have a tendency to call



these insects wasps due to the coloring, but this beetle is not equipped to sting like a wasp.

It is easily seen, then, that with all these borers in trees, much of our firewood brought in carries the immature forms of these insects and the adult stage emerges after the wood is in the house. Not only do some of these beetles come out of firewood, but they often come from newly made furniture, where they make small holes in the wood at the time they emerge.

There is nothing that the home owner can do to prevent this, nor is there need of it, as the beetles will soon die.

(:45) It's time to put a winter blanket on the strawberry bed, folks. Commercial strawberry growers no doubt have already taken care of this matter, especially in northern Illinois. They know that when the air temperature drops to 18 or 20 degrees above zero strawberry plants should have some protection. According to A. S. Colby, specialist in small fruits, University of Illinois College of Agriculture, the better growers use wheat straw for a mulch. Marsh hay or oat straw, if it's free from weed seed, can be used, too. However, I'm just a bit concerned about you victory gardeners who may have set a couple of strawberry rows this past spring. I always see too many of you using lawn clippings and leaves. Well, such materials pack too much and they aren't a lot better than nothing at all. So drop around to your feed store and pick up a bale of straw. You really need about a three-inch covering of straw on the plants in southern Illinois. and farther north you can use a little more. The important thing is to get that mulch of straw on the strawberry bed right away.

(:30) It's a simple matter to make a report to the war price and ration board of the meat sales that a farmer makes and of the ration coupons he collects to cover those sales.

1. The first group of people who are interested in the study of the history of the world are the historians.

2. The second group of people who are interested in the study of the history of the world are the geographers.

3. The third group of people who are interested in the study of the history of the world are the economists.

4. The fourth group of people who are interested in the study of the history of the world are the sociologists.

5. The fifth group of people who are interested in the study of the history of the world are the philosophers.

6. The sixth group of people who are interested in the study of the history of the world are the scientists.

7. The seventh group of people who are interested in the study of the history of the world are the artists.

8. The eighth group of people who are interested in the study of the history of the world are the writers.

9. The ninth group of people who are interested in the study of the history of the world are the poets.

10. The tenth group of people who are interested in the study of the history of the world are the musicians.

11. The eleventh group of people who are interested in the study of the history of the world are the actors.

12. The twelfth group of people who are interested in the study of the history of the world are the dancers.

13. The thirteenth group of people who are interested in the study of the history of the world are the athletes.

14. The fourteenth group of people who are interested in the study of the history of the world are the teachers.

15. The fifteenth group of people who are interested in the study of the history of the world are the students.

16. The sixteenth group of people who are interested in the study of the history of the world are the parents.

17. The seventeenth group of people who are interested in the study of the history of the world are the grandparents.

18. The eighteenth group of people who are interested in the study of the history of the world are the great-grandparents.

19. The nineteenth group of people who are interested in the study of the history of the world are the great-great-grandparents.

20. The twentieth group of people who are interested in the study of the history of the world are the great-great-great-grandparents.

21. The twenty-first group of people who are interested in the study of the history of the world are the great-great-great-great-grandparents.

22. The twenty-second group of people who are interested in the study of the history of the world are the great-great-great-great-great-grandparents.

23. The twenty-third group of people who are interested in the study of the history of the world are the great-great-great-great-great-great-grandparents.

24. The twenty-fourth group of people who are interested in the study of the history of the world are the great-great-great-great-great-great-great-grandparents.

The war price and ration boards are going to send out forms to all farmers who have slaughter permits. All that farmers will need to do is to fill out those simple forms at the end of the month and send them with the coupons collected to the war price and ration board.

If a farmer doesn't yet have his slaughter permit then when he goes to get it he can get the necessary forms on which to make the report of the ration coupons.

(:30) Alfalfa damaged by leaf hopper, leaf spot and other injuries during the past season was found to contain 25 per cent less feeding value than uninjured alfalfa, according to H. J. Snider, agronomist, University of Illinois College of Agriculture.

He points out that uninjured and green alfalfa from the Minonk Experimental Field contained 415 pounds of protein and 77 pounds of minerals for each ton of hay. On the other hand, alfalfa hay that was injured by leaf hopper and leaf spot contained only 312 pounds of protein and 58 pounds of mineral for each ton of hay.

That's a difference of a little more than 100 pounds of protein and 19 pounds of mineral for each ton. You can readily see it would have quite an effect on the feeding value.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture and the United States
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NINETY-FIRST

ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture)

Speaking time: 5:40 minutes

November 15, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to Extension Editor's Office, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

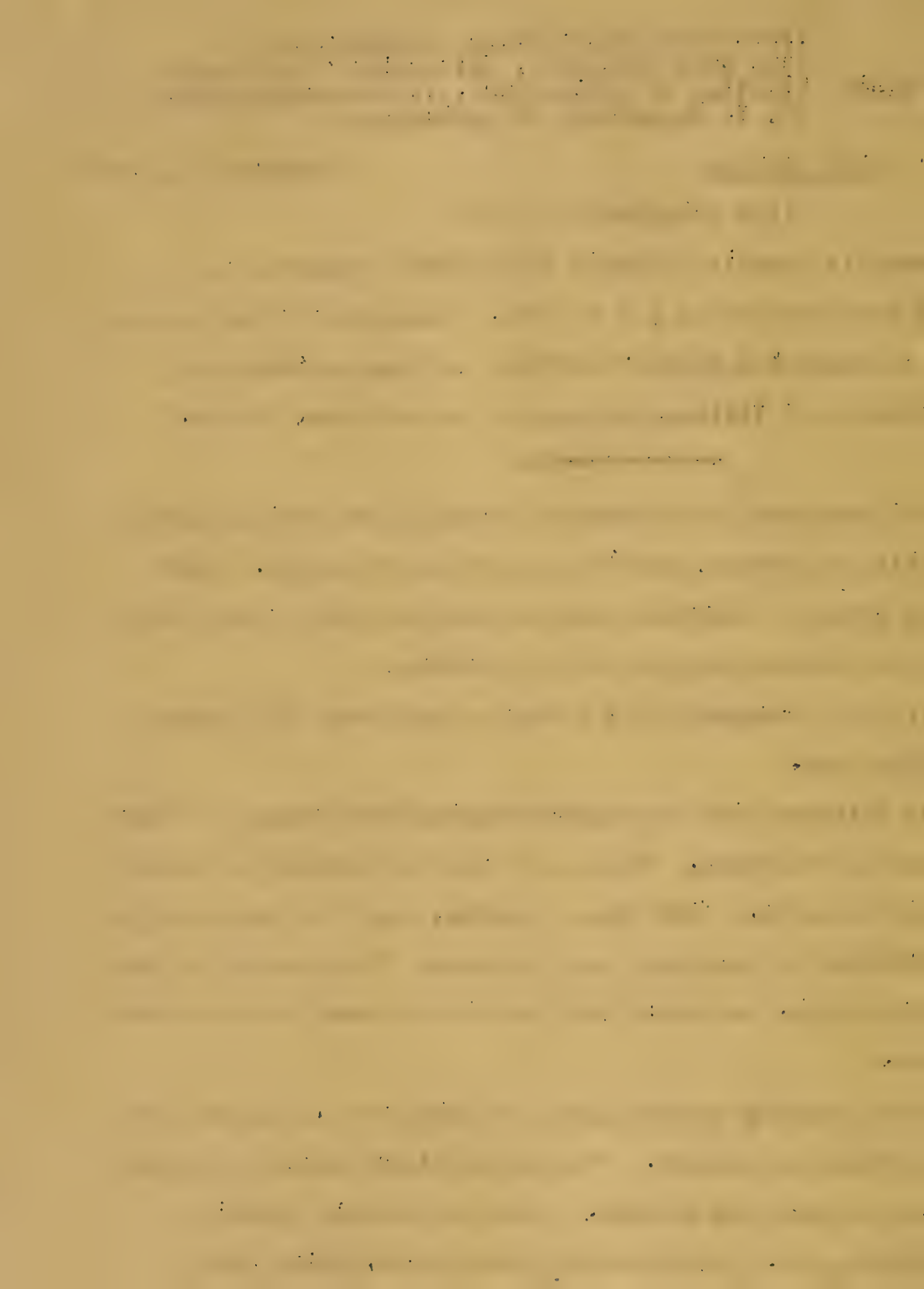
(1:30) Now that dairy farmers generally are trying hard to produce more milk and butter, here's a report worth noting. Last year, one large group of dairymen averaged nearly twice as much milk and butter per cow as the average for the country.

Their cows averaged 8,323 pounds of milk and 339 pounds of butterfat for the year.

These dairymen with the high-producing cows belong to Dairy Herd Improvement Associations. They kept careful records on feeding and on milk and butterfat. With these records, they fed the cows in their herds according to how much they produced. They saved the best cows for breeding stock, and when they got rid of cows, they disposed of the poor ones.

Very few testing associations are being set up these days because of a shortage of testers. The associations already in operation cannot take in many new members. Here in Illinois there's a shortage of testers, too. In virtually every state, Dairy Herd Improvement Associations now have waiting lists of dairymen who want to put their herds on test.

But until there are enough testers and associations to handle their herds, C. S. Rhode, professor of dairy extension, University of Illinois College of Agriculture urges all dairymen now outside



the associations to do two things which will help to step up production of their herds.

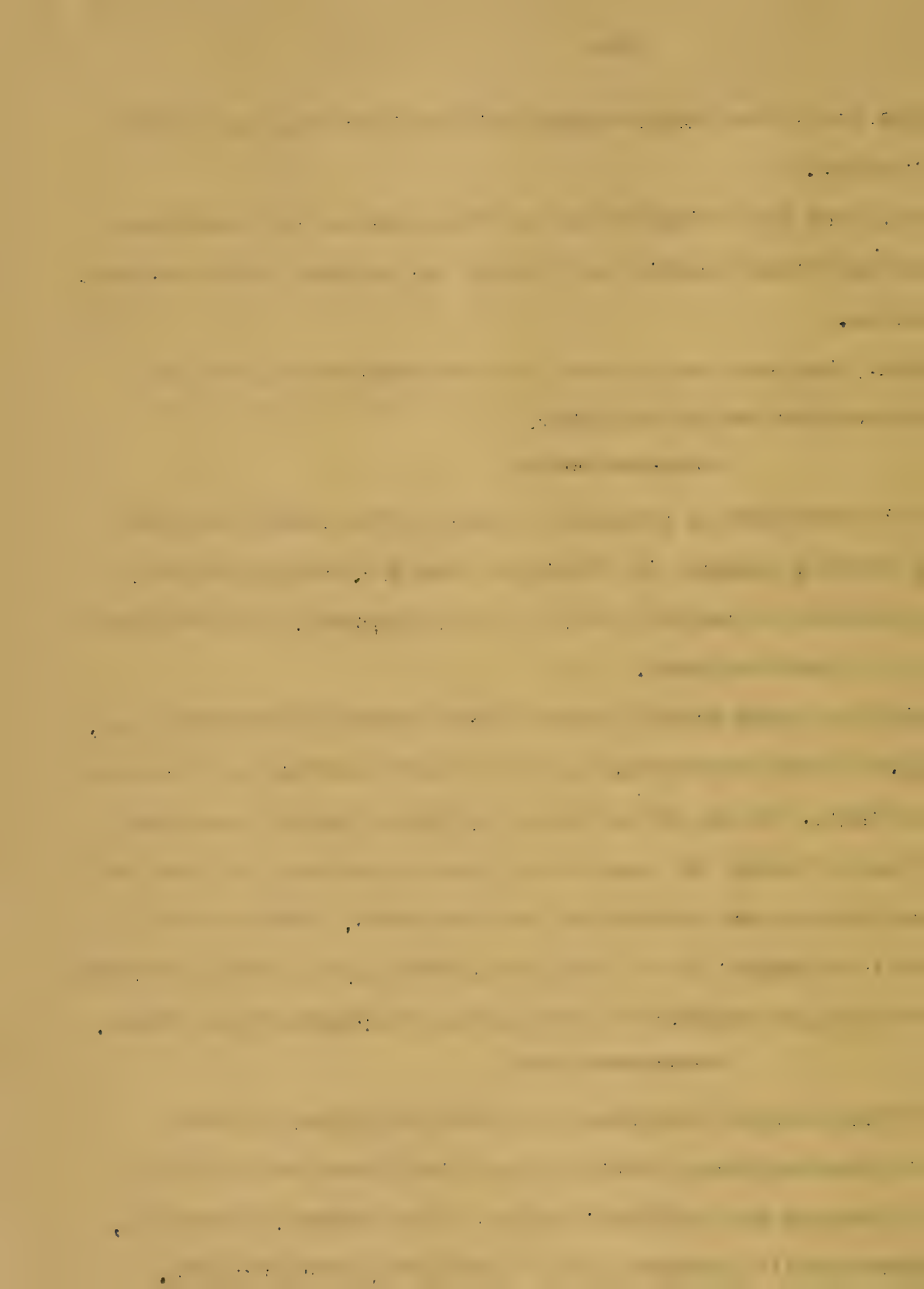
First, they can weigh the milk from each cow at least one day a month and use these weights as a guide in feeding grain according to production.

Second, they can use private milk records as a guide in selecting heifer calves and in culling.

(:30) I have here a progress report on the federal-state Bang's disease control program in Illinois from Dr. Robert Graham, head of the department of animal pathology and hygiene, University of Illinois College of Agriculture.

During the eight months' period from January 1 to August 31, 1943, about 13,000 herds containing almost 125,000 cattle were tested in Illinois, he says. Three out of every 13 herds tested possessed reactors. One out of every 18 cows tested was a reactor, and one out of every 17 cows tested was classified as a suspect. During this period, January 1 to August 31 of this year, some 7,000 calves between the age of four to eight months were vaccinated throughout the state.

(:20) The boys in the armed services are going to have their turkey for Thanksgiving, Christmas and New Year----thanks to Illinois turkey growers who did their share. That means, of course, you turkey growers aren't required now to sell only for army use. This restriction was lifted October 25. I know some turkey growers who haven't been advised on this matter will appreciate knowing that they can sell their turkeys now wherever they please.



(:35) Here's just a little reminder to Illinois swine growers on marketing hogs. It comes to us from E. T. Robbins, livestock extension specialist, University of Illinois College of Agriculture. He points out that if you really want to gain the full benefit of the marketing support program, make your marketing arrangements as far ahead of shipment as you can. You'll avoid market congestion, too. It's a good way to show your appreciation to packing plants that are handling about 20 per cent more hogs with 10 to 15 per cent less labor. After all, there's a limit to their capacity, so let's give them a "a break" and help assure ourselves of the highest prices for hogs. Plan your marketing of hogs in advance.

(1:15) Here are next year's prospects for fats and oils, as forecast by the agricultural economists.

Although farmers this year produced 10 to 15 per cent more of our chief oilseeds -- cottonseed, soybeans, flaxseed and peanuts -- than a year ago, a still stronger demand in the future is the forecast.

So, they think it very likely farmers will put more land in vegetable oil crops in 1944.

On the other hand, while there is plenty of demand for butter, lard and other animal fats, livestock feed is not so plentiful, considering the large number of animals farmers have to feed. With less feed, farmers will raise fewer pigs. The economists figure the pig crop next year may run 10 to 20 per cent smaller than the record pig crop of this year. That will mean less lard and grease.

In fact, the reduced output of animal fats beginning about a year from now may more than offset the increased output of vegetable oils. So, the experts think the total production of fats and oils in 1944-45 may be less than in the crop year now beginning.

True, the people in this country are using less fats and oils than they were using a couple of years ago. But we are exporting more. And our exports of fats and oils are likely to show further gains as the Allied forces liberate more of Europe.

(1:30) Now about the prospects for livestock feed.

As a matter of fact, farmers have the next biggest supply of feed on record -- just a little short of the record-breaking supply of last year. The supply of feed grains and the chief by-product feeds is nearly 20 per cent above the average in the years just before the war. Yes, the supply is big -- but not big enough.

Agricultural economists point out the supply of feed grains has not kept pace with the increase in the number of grain-eating animals. They say that compared to the number of livestock on farms, the feed concentrate supply for the coming year is 12 per cent less than the supply we had this past year, and the smallest in the past six years.----Remember, that's compared to the number of animals farmers have to feed.

The number of animals on farms increased 11 per cent the past year. This year, the number is probably up that much again. By the first of next January, we will have many more head of livestock than ever before in our history. If we scrape close to the bottom of the reserve feed bin and distribute and use the feed wisely, most farmers may be able to feed almost as much per animal as usual -- but not near as heavily as they did this past year.

Of course, farmers in some parts of the country will have much less feed than others. Farmers in parts of the country that depend on shipped-in feed may have to feed considerably less feed to each animal.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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University of Illinois College of Agriculture and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

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Speaking time: 5 minutes

November 18, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit. Requests for information may be mailed to Extension Editor's Office, 109 New Agriculture Building, University of Illinois College of Agriculture, Urbana.)

(1:15) Now that some dairymen are beginning to get their first checks under the dairy payment plan, let's look a little further into what this plan is intended to do.

We're finishing the year short of enough milk to meet goals. And agricultural economists say that if the present trend is continued, we will come up shorter next year -- UNLESS something is done to encourage dairy production.

In order to help keep up milk production, the War Food Administration is making payments to dairymen to offset the increase in feed costs since September a year ago.

Of course, dairymen are up against several wartime handicaps. But the main reason for failure to reach goals is feed. With the relationship between prices of milk, and hogs and other livestock products, dairymen haven't been able to bid as high for feed as some other farmers.

The War Food Administration has offered encouragement to dairymen to sell more whole milk in the new dairy payment plan.

Dairymen who sell whole milk get nearly twice as big a payment as those who sell butterfat and keep the skim milk on the farm.

War Food officials expect these rates to bring forth more whole milk in 1944, especially in Minnesota, Wisconsin and other mid-western states.

Application for October payment must reach the county Triple-A office before December 1.

If you have any questions about the rate of payments for whole milk or cream sales in your region, or about how to go about getting payments, get in touch with your county Triple-A office or county farm adviser.

(1:15) Several thousand women are now doing the work of farm hired hands who have gone into the armed services or into war jobs.

With hired help becoming increasingly hard to get, farmers in some communities will need more of year-round women workers during the coming year.

Farm labor specialists of the Agricultural Extension Services point out that many of these women farm hands have husbands in the armed services. Others are single women with relatives in the service; they range all the way from former factory workers to stenographers, models and opera singers.

Up to the present, many of these year-round women workers have gone on dairy and poultry farms. On dairy farms they do everything from milking and feeding the cows to delivering milk and cream. On poultry farms they do everything from feeding the chickens to candling eggs and packing baby chicks.

Farmers report that these women do good work. They are gentle in handling the cows and chickens. And, in the dairy, they see dirt where a man never would. A Massachusetts farmer says the milk inspector reported a steady drop in the bacterial count of his milk after two members of the Women's Land Army went to work in his dairy.

As a rule, these year-round women workers live in the farm home. But a number of farmers who have the space arranged for two or more women to share a tenant house or other quarters.

Several states, including Illinois, Connecticut, Massachusetts, Maine and New York, had special training schools this year to train these year-round women workers. Other states are planning training schools to try to meet the increased demand for women workers during the coming year.

(1:15) After close to two years of war, dairy farmers and the dairy industry have come to a point where they have to scratch their heads a little to keep the milk moving from farm to market.

Under the terrific beating milk trucks take traveling an average of close to 600 miles a week, week in and week out, a great many of them are beginning to wear out. And with the tremendous need for trucks for military use, truck builders probably will turn out only enough trucks to replace one per cent of the milk trucks now running. A shortage of milk trucks is right upon us.

But transportation specialists of the War Food Administration point out that nearly every milk area in the United States now has a dairy industry transportation committee. With the help of the Office of Defense Transportation, these committees are paring off three miles here and five miles there on milk routes to save trucks. Those little savings add up to huge figures.

Under these truck-saving plans, some dairymen may ship their milk or cream to a different market from the one they have been selling to.

If a dairyman has any objection to the plan, he will have his "say so" before the plan is put into effect. If he has any objection to the prices he is getting, or marketing practices, after the plan is adopted, he can still make an appeal.

A good many communities already have worked out successful milk-truck saving programs. Other communities will need to do the same thing to keep their milk moving to market during the war emergency.

For information about setting up a dairy truck-saving plan in your community, get in touch with your county farm transportation committee or the district office of the Office of Defense Transportation.

(1:15) Right now, when you're changing the oil in your car and putting antifreeze in the radiator, don't forget to winterize your electric water system too.

That's the suggestion of rural electrification specialists of the College of Agriculture and the U. S. Department of Agriculture. They point out that while most water systems are installed in fairly well protected places, it's still a good idea to take a few extra cold weather precautions.

For example, see that the basement, building or pit housing the water system is as tight as possible. This may mean replacing broken panes in basement windows, weather stripping the pump house door or making a tighter cover for the well pit. Hay, straw or fodder spread over a well pit or used to bank the walls of a basement or pump house will help protect the water system in severe weather.

Another good way to prevent frozen pipes is to place a 100-watt light bulb in a guard close to the pump so it can be turned on when needed to produce heat.

Unless water systems are located in fairly warm basements or heated buildings, change the heavy summer oil and grease to lighter oils during cold weather. And stop any excess leakage. Water which would drain away in the summer time may freeze and cause trouble in the winter.

Prevent freezing....switch to light oil....stop leakage--- these are the most important points to remember in keeping your pump on the job this winter. However, if you would like more information on how your electric water system works and how to care for it all year round, write for the free U. S. Department of Agriculture leaflet, "Care of Your Electric Water System." Address your request to the Rural Electrification Administration, St. Louis, Missouri.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

TNM:CG 11-18-43

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NINETY-THIRD

ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 3½ minutes

November 22, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a
public service for your use as you see fit.)

(:30) Members of the Illinois State Horticultural Society, oldest farm organization in the state, will hold their annual meeting on December 13, 14 and 15 at the Hotel DeSoto, St. Louis. The meeting will be held in conjunction with the 57th annual convention of the American Pomological Society, at which 12 states will be represented. These states include Missouri, Iowa, Indiana, Kansas, Nebraska, Arkansas, Kentucky, Oklahoma, Tennessee, Wisconsin and Minnesota. Discussions at the three-day conference will be centered around national problems of the fruit industry and things to come in horticulture after the war, according to an announcement to Illinois fruit growers by M. J. Dorsey, head of the department of horticulture, University of Illinois College of Agriculture.

(1:15) Now let's glance for a moment at the fertilizer situation with L. B. Miller, agronomist, University of Illinois College of Agriculture.

Illinois farmers will have enough fertilizer to meet the needs of all essential crops if they'll apply now for the fertilizer they need next spring and accept delivery of it during winter months. This will avoid peak loads for labor, transportation and keep goods moving out from fertilizer plants.

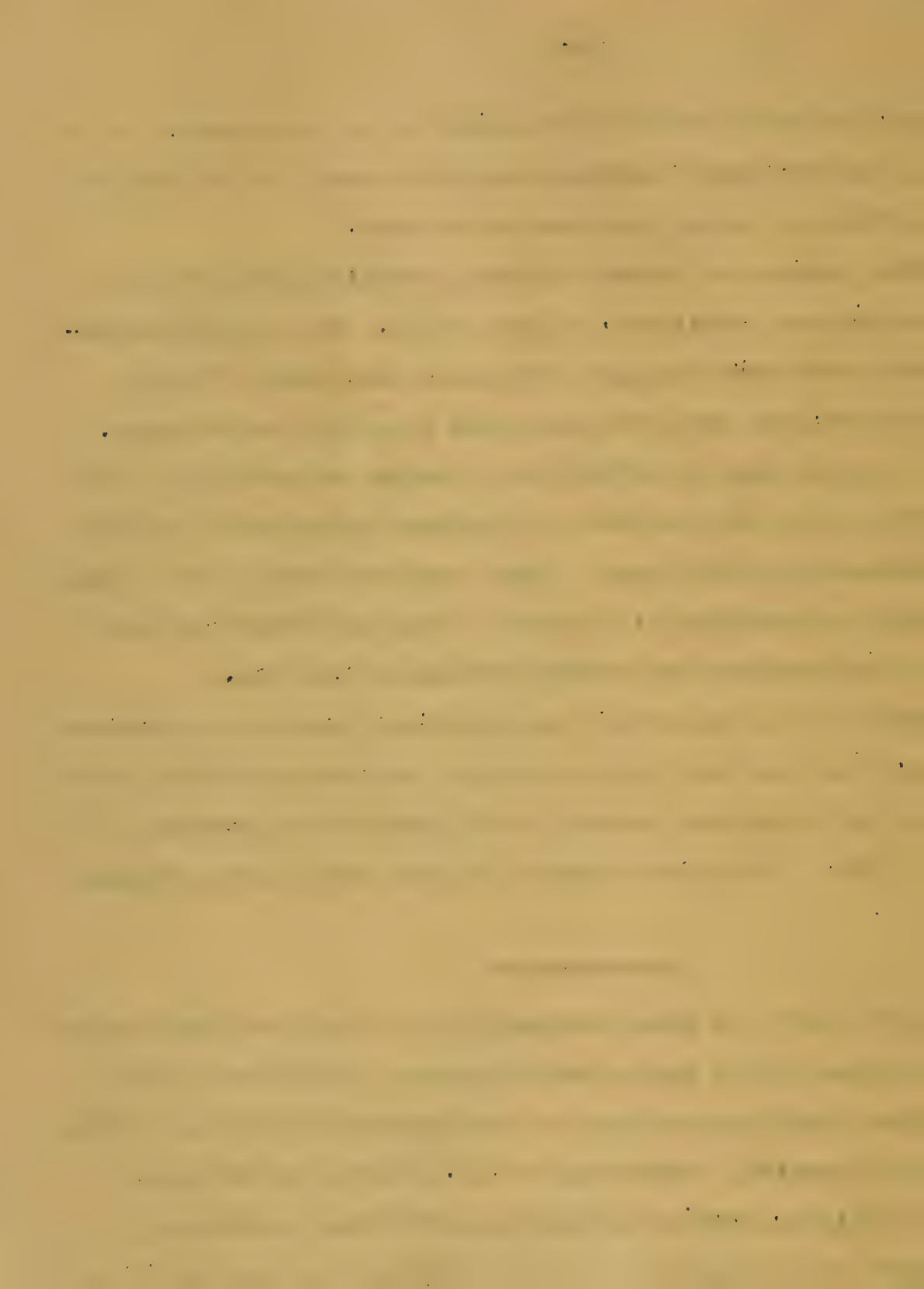
Farmers will have no difficulty in storing fertilizer, if a few simple rules are followed. It should be stored in the sacks in

which it came, and not piled more than eight to 10 sacks deep. A dry, floored, weather-proof building should be used. If the available space has no floor, a raised platform may be used.

The purchase of higher analysis fertilizer for 1944 will be both patriotic and profitable, Miller states. While higher analysis fertilizer costs more for each 100 pounds than that of lower plant food content, the cost for each pound of plant food is lower. For instance, twelve bags of 0-20-20 will furnish as much plant food as 20 bags of 0-12-12 but the price of the more concentrated material will be approximately \$2.25 lower. Fewer bags mean more space to ship more fertilizer or something else needed in the war effort and will also simplify the handling and storage problem on the farm.

Let's keep in mind that the fertilizer business is heaviest in the spring. But the tight labor, storage and transportation system as it affects the fertilizer industry won't permit that practice in the spring of 1944. It's a wise farmer who will order his fertilizer now.

(:30) Here's an item that may help to take the sting out of what the weatherman did to beekeepers this year. You'll recall the deluge this past spring caused bees to work overtime in trying to find enough pollen to survive. According to V. G. Milum, entomologist, University of Illinois, OPA is authorizing additional provisional sugar allotments to beekeepers registered as industrial users. This supplemental allotment of sugar is in addition to the regular provisional allotment of ten pounds of sugar which may be obtained by any beekeeper who is registered as an industrial user. The additional amount is limited to a maximum of 15 pounds for each bee colony for



the period from September 14 to December 31, 1943. For further information, see your county war board for rationing guide number 41.

(:45) Mouse control can profitably become a regular practice by Illinois orchardists, says V. W. Kelley, extension horticulturist, University of Illinois College of Agriculture. He cites one instance just this past winter of an orchardist who had 400 trees damaged so badly they had to be bridge-grafted.

There is no substitute for poisoned bait when it comes to controlling mice in orchards. Strychnine-coated oats, wheat, rolled oats bait, zinc-phosphide-treated apples or both types of bait are recommended. One quart of apple bait, which should be prepared fresh daily, will treat about an acre of orchard, depending, of course, on the infestation. For best results, place the bait in the mouse runways in the forenoon. Mice are most active from late forenoon until mid-afternoon. Avoid baiting on rainy or windy days or when extreme cold prevails.

Your regular dealer of orchard supplies will be able to furnish you with poisoned bait. Follow the manufacturer's suggestions for its application, and remember the precautions in handling it. It's poison to humans, too, you know.

(:30) Mastitis is sabotaging our greatly needed milk supply, says Dr. Robert Graham, head of the department of animal pathology and hygiene, University of Illinois College of Agriculture. Production in infected herds is being cut as much as 20 per cent. A herd program of mastitis prevention and control is the best solution for reducing these staggering losses. But such a program to be effective takes

the cooperative efforts of the dairyman, local veterinarian and the department's laboratory, Graham says. He urges all dairymen to write for the free leaflet APH 22 on the herd program of mastitis control. Address your request to this station.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

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NINETY-FOURTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
College of Agriculture, in cooperation with
U. S. Department of Agriculture

Speaking time: 3 1/4 minutes

November 24, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit.)

(1:00) State Selective Service Headquarters has issued a revised state policy on agricultural registrants, according to a report I have here from P. E. Johnston, state supervisor, emergency farm labor, University of Illinois College of Agriculture. Here it is in a "nut shell."

It involves pre-Pearl Harbor fathers with agricultural experience, who maintain a bona fide family relationship. If such registrants are now not engaged in agricultural pursuits, State
Service
Selective/Headquarters has recommended that these registrants be allowed to return to an agricultural occupation or endeavor before the Local Selective Service Board has mailed them an Order to Report for Induction. Understand--I say it has been recommended that Selective Service Boards make such exceptions, placing the registrants in Class III-C. A registrant who is not a pre-Pearl Harbor father must transfer to an agricultural occupation or endeavor before he is classified 1-A, if he is to be eligible for a farm deferment.

We realize the question of increasing agricultural production is vital in all rural sections. With Local Selective Service Boards and County War Boards uniting in a common policy for the welfare of their nation and local communities, Johnston believes that a satisfactory solution of farm labor will be found so that food may continue to fight for freedom.

(:45) When should grain be marketed? Well, you'll find the answer to that question in a circular by the same name, number 5-1-6, prepared by L. J. Norton, chief in marketing, University of Illinois College of Agriculture. A copy is free for the asking by addressing your request to this station.

Information included in Circular 5-1-6 can be applied to the current corn crop, which is carrying more moisture than in some recent years when corn dried out more thoroughly before it was cribbed. The question might arise as to whether or not it would be worth more if sold this winter with the water in it or next summer after it has lost moisture and weight. Unless the base price is advanced, it will bring more if sold now at the schedule of discount for moisture prevailing in the latter part of November.

Circular 5-1-6 supplies similar information for wheat, oats and soybeans. It analyzes the cost involved in holding different crops and shows how costs must be weighed against anticipated advantages. It may help you to sell your crops at the most advantageous time.

(:45) Here's some good news for victory gardeners from Lee Somers, associate in vegetable gardening extension, University of Illinois College of Agriculture. He says there'll be better fertilizers for 1944 victory gardeners.

This past year only one grade of fertilizer was available for the entire country, 3-8-7. That is, three units of nitrogen, eight of phosphoric acid and seven of available potash--in other words, 18 plant food units. Next year, gardeners in midwest states will be able to purchase a 6-10-4 fertilizer, or 20 plant food units. In addition, small quantities of nitrate of soda, ammonium nitrate and superphosphate to supplement mixed fertilizer, where such is needed, will be available.

Somers points out that WFA officials indicate about 111,000 tons of 3-8-7 victory garden fertilizer were distributed in the spring of 1943. This was in addition to the regular grades of mixed fertilizer which farmers were permitted to use.

(:45) I have a little item here from B. G. Berger, entomologist, Illinois State Natural History Survey, on firebrats or silverfish. We've been receiving a number of requests on the control of these speedy, wingless insects running around about the floor, the furnace or upstairs. Firebrats thrive on a menu of starched clothes, rayon fabrics, book bindings and papers. They can become a costly host if allowed to run riot. But Berger says these insects are easily controlled with a poisoned, dry bait placed in small piles in out-of-the-way places frequented by these insects. The bait consists of 75 per cent ready-mixed pancake flour or wheat flour, 15 per cent powdered sugar and 10 per cent sodium fluoride, Paris green or cryolite. I'll repeat that: 75 per cent ready-mixed pancake flour or wheat flour, 15 per cent powdered sugar and 10 per cent of either Paris green, cryolite or sodium fluoride. If you didn't get that down, write for your free copy of NH 116 on silverfish control. Address your request to this station. The number again, N-H-1-1-6.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May and June 30, 1914

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NINETY-FIFTH

ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 3:15 minutes

November 29, 1943

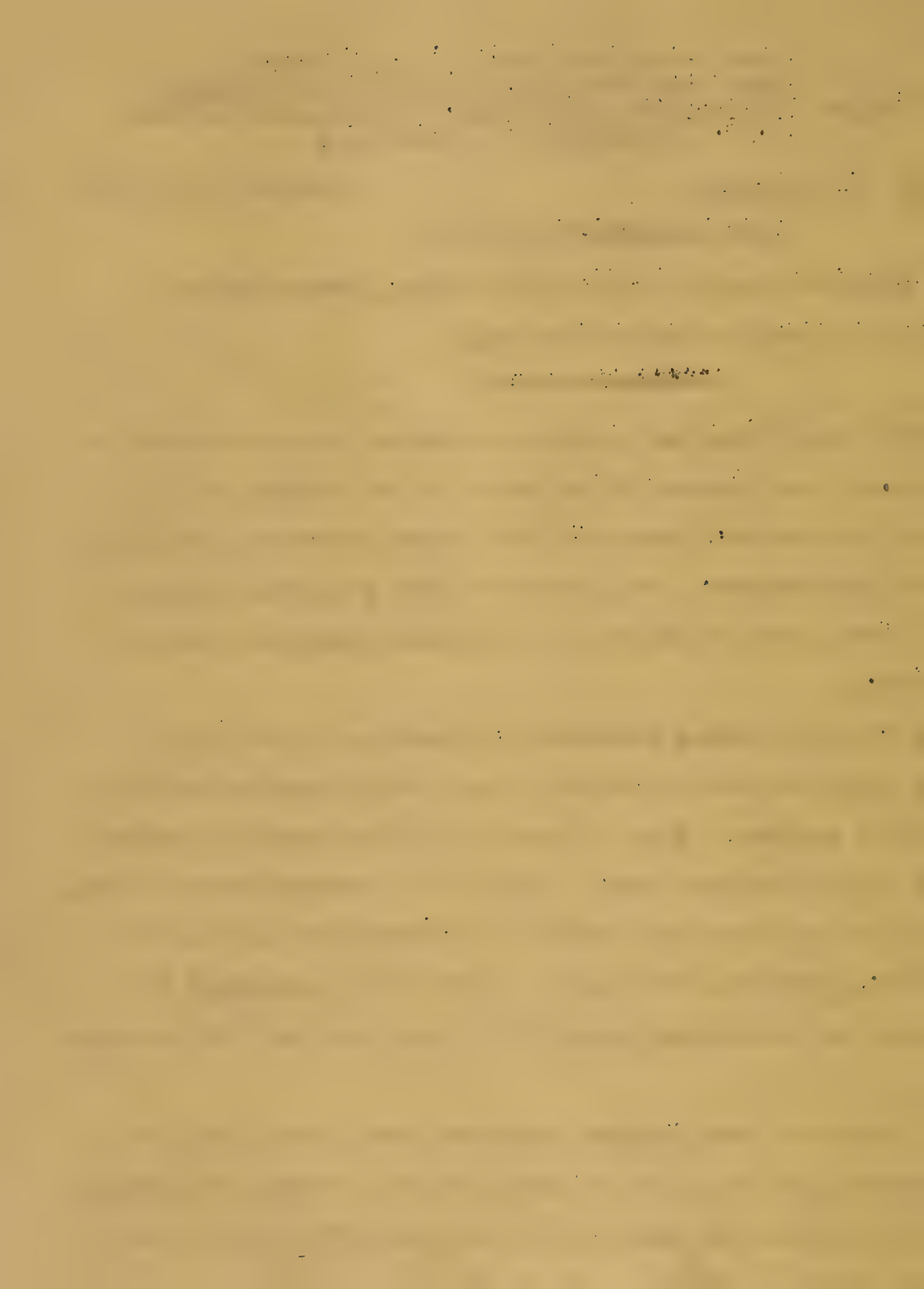
(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit.)

(1:00) Recruiting and placing year-round farm workers is a number one job for the balance of the year, in the opinion of P. E. Johnston, state supervisor, emergency farm labor, University of Illinois College of Agriculture. He points out that year-round workers are needed in most areas of the state to maintain necessary agricultural production.

For the week ending November 19, Johnston states that Illinois farm advisers have indicated a need for 377 married and 296 single year-round workers. Also, 70 new orders for seasonal workers were received during the same week. Farmers are working longer hours, exchanging help where there is a shortage of hired help and employing high school boys. However, it's going to take more year-round farm workers to reach the production goals which have been set for Illinois farmers.

The answer to the problem, Johnston says, lies partly in a new recommendation from the State Selective Service System concerning pre-Pearl Harbor fathers who seek year-round farm jobs--fathers who have had agricultural experience. It has been recommended that these men be permitted to take farm jobs with sufficient war units and to be placed in Class III-C, provided they become employed on farms before they receive an Order to Report for Induction.



(1:15) Here are a few highlights of the October report for Illinois dairy herd improvement associations, courtesy of J. G. Cash, dairy extension specialist, University of Illinois College of Agriculture.

The Ford county association led all others in the state for the fourth consecutive time in butterfat production during October with an average of 28.3 pounds a cow. The state average was 23.7. Leo Fryman is tester for 316 cows in 25 herds.

The herd of eight purebred Jerseys owned by Fred Robertson of Kinderhook, Adams county, won individual herd honors for the same month with an average of 51.2 pounds a cow.

Other leading herds include: 15 of mixed breed owned by Paul Buenger, Eureka, Woodford association, 47.3; seven purebred Guernseys of Harry Diehl, Gibson City, Ford association, 46.8; 15 purebred Holsteins of Walk Brothers, Neoga, Effingham number one association, 46.1, and five purebred Jerseys of Ross Griffith, Galesburg, Knox association, 43.6.

Other leading associations, their testers and average butterfat production of each cow, were: Kendall, Eleanor Hughes, 26.9; Champaign, Bernice Cross, 26.8; northern Illinois State Institutions, C. H. Lund, 26.7, and Kankakee B, Bonnie Gettle, 19.5.

(1:00) Farmers are raising a record number of meat animals and these animals will produce a record amount of meat during the next year.

This is the way Uncle Sam plans to divide up that meat.

Out of every hundred pounds about 69 pounds will go to civilians in this country. About 16 pounds will go to military and war services. A little less than 2 pounds will go into necessary

reserves. Almost 12 pounds will go to Lend-Lease....to countries that are fighting on our side and can't raise enough food for themselves....and countries that are occupied by forces of the United Nations....and others. About a pound will go to a class that is called "exports and shipments."these include the Red Cross, some of our own territories and some friendly countries which have always bought meat from us and who have to count on us for meat now.

To repeat, out of every hundred pounds of meat we will produce this next year 12 pounds will go to Lend-Lease....2 pounds will go into a reserve for emergencies....one pound will go to our own possessions and friendly countries and 85 pounds will go to our own people, civilians and soldiers.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

367 NINETY-SIXTH
21 ILLINOIS FARM FLASH
72

Speaking time: 4 1/2 minutes

December 2, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a
public service for your use as you see fit.)

THE LIBRARY OF THE

JAN 27 1944

UNIVERSITY OF ILLINOIS

(1:00) If you have some hogs that you would like to butcher and sell the meat, you can go right ahead now. You don't have to have a permit to dress as many hogs as you want to for sale--you can sell as much of the meat as you wish to. All of the regulations that govern these things as they apply to hogs--note particularly only as they apply to hogs--have been lifted by the War Food Administration for 90 days beginning November 17.

But that doesn't mean that OPA regulations have been lifted. You must collect ration points for the pork you sell--though there has been a change in the number of points you will have to collect per pound of pork sold--and you must sell at or below the ceiling price that has been established by the Office of Price Administration--and you must make a monthly report of the ration points you collect to your local war price and ration board.

Remember that the regulations have been lifted on hog slaughter only--there has been no change whatever in the regulations that apply to the slaughter of cattle, calves, sheep and lambs.

The reason behind lifting the slaughter restrictions on hogs is that we will need to use all of the slaughtering facilities we have--whether on the farm, in towns or in cities--to take care of the record crop of hogs that has been produced this year.

THE UNIVERSITY OF CHICAGO
LIBRARY

100 East 57th Street
New York 22, N.Y.

October 10, 1964

Dear Mr. [Name]:

I have just received your letter of September 24, 1964, regarding the [Topic].

I am sorry that I cannot give you a more definite answer at this time.

Sincerely,
[Signature]

I am sure that you will understand my position and the need for further study.

I will be glad to discuss this matter further if you wish to call on me.

I am sure that you will find this information helpful.

Very truly,
[Signature]

I am sure that you will find this information helpful.

I am sure that you will find this information helpful.

I am sure that you will find this information helpful.

Very truly,
[Signature]

I am sure that you will find this information helpful.

I am sure that you will find this information helpful.

(1:00) Victory gardeners will be able to "put the bee on the beetle" in 1944, says H. B. Petty, extension entomologist, Illinois State Natural History Survey. He points out that WFA has taken steps to make a little more rotenone available for next year, since the supply of cube and timbo roots, from which rotenone is derived, is a little improved.

Petty says that rotenone is one of the best all-around garden insecticides on the market. In fact, it's just about "tops" when it comes to controlling cabbage aphids, cabbage worms, asparagus beetles and Mexican bean beetles.

Victory gardeners will be able to buy about five pounds of rotenone when in the form of a powder, or a pint when in the form of a liquid, without furnishing a certificate of use. It will contain about one-half of one per cent rotenone, which is potent enough to deliver a knockout punch to most insects.

Commercial growers will also be able to fare a little better in the use of rotenone for 1944. Finished dusts intended for commercial use may contain up to three-fourths per cent rotenone. The new order on the use of rotenone also permits its use for the control of cattle grubs, cattle lice and sheep ticks.

(1:00) Underfeeding cuts production, but overfeeding wastes feed, says J. G. Cash, extension dairy specialist, University of Illinois College of Agriculture. That means we'll need to check carefully the quantity of grain being fed each cow and plan a feeding program so that each cow will be fed according to production.

Members in dairy herd improvement work and other good dairymen follow that practice, according to Cash. Owners of Guernseys and Jerseys feed one pound of grain each day for every two and one-

fourth to three and one-fourth pounds of milk produced each day. But for Ayrshires, Brown Swiss, Holsteins and Milking Shorthorns the production for each cow every day must be a little higher to warrant one pound of grain. In this case it's one pound of grain for every three and one-fourth to four pounds of milk produced each day.

Cash urges that the rate of feeding to lower producers be reduced and inefficient cows be culled from the herd.

(:30) Here's something you'll want to mark "must attend" on your list for future appointments--the forty-third annual Farm and Home Week at the University of Illinois College of Agriculture. The dates are February 8, 9 and 10. The same type of condensed, practical program will be presented as in 1943. Topics for discussion will be based on production of food and feed, economics, farm management, rural life and home economics. In addition there will be at least one speaker of national or international reputation at the general sessions each day. So let's keep in mind the dates of the forty-third annual Farm and Home Week on the University of Illinois campus--February 8, 9 and 10.

(1:00) Illinois dairymen will welcome any suggestions on converting food wasters to food savers in these critical times of feed shortages. So let's glance for a minute at some suggestions along that line from C. S. Rhode, professor of dairy extension, University of Illinois College of Agriculture.

Cull inefficient cows. Feed grain strictly according to production. Balance grain mixtures to fit the kind and quality of roughage and remember to feed balanced mixtures instead of hand-feeding protein. Rotate pastures. For commercial herds raise only heifers needed for replacement. Secure highest possible yield of hay and

The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations (1) for arbitrary values of the parameters α and β . It is shown that the system (1) has solutions for arbitrary values of the parameters α and β if and only if the conditions (2) are satisfied. The second part of the paper is devoted to a detailed analysis of the properties of the solutions of the system (1) for arbitrary values of the parameters α and β . It is shown that the solutions of the system (1) are unique and stable with respect to the initial conditions. The third part of the paper is devoted to a detailed analysis of the properties of the solutions of the system (1) for arbitrary values of the parameters α and β . It is shown that the solutions of the system (1) are unique and stable with respect to the initial conditions.

REFERENCES

1. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 1, 1967.
2. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 2, 1967.
3. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 3, 1967.
4. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 4, 1967.
5. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 5, 1967.
6. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 6, 1967.
7. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 7, 1967.
8. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 8, 1967.
9. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 9, 1967.
10. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 10, 1967.
11. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 11, 1967.
12. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 12, 1967.
13. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 13, 1967.
14. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 14, 1967.
15. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 15, 1967.
16. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 16, 1967.
17. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 17, 1967.
18. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 18, 1967.
19. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 19, 1967.
20. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 20, 1967.

REFERENCES

1. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 1, 1967.
2. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 2, 1967.
3. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 3, 1967.
4. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 4, 1967.
5. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 5, 1967.
6. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 6, 1967.
7. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 7, 1967.
8. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 8, 1967.
9. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 9, 1967.
10. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 10, 1967.
11. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 11, 1967.
12. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 12, 1967.
13. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 13, 1967.
14. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 14, 1967.
15. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 15, 1967.
16. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 16, 1967.
17. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 17, 1967.
18. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 18, 1967.
19. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 19, 1967.
20. A. M. Lioy, *Tr. Semin. Prikl. Matem.*, **1**, No. 20, 1967.

pasture crops. Use legumes, rye and Sudan grass in your pasture program. Freshen cows every 12 months. Grow heifers largely on good roughage. Use temporary silos in storing good quality roughage.

Of course, some of those suggestions cannot be put into practice immediately. But we can plan ahead. In the meantime, inefficient cows can be culled. Heifers can be grown largely on good roughage. The correct feeding practices mentioned are outlined in circular 502 and are good any time and all the time, and in a folder entitled Dairy Cattle Feeding and Management Geared to 1944 Production Needs. These publications are free for the asking. Address your request to this station.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

TNM:CG
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Speaking time: 45 minutes

December 6, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit.)

JAN 27 1944

UNIVERSITY OF ILLINOIS

(1:15) Any time is a good time to cull the laying flock, says H. H. Alp, associate professor of poultry extension, University of Illinois College of Agriculture.

Good poultrymen are always on the alert for the bird showing tendencies toward becoming a cull. Every poultry house should have a good catching hook hanging on the wall, and it ought to be used. Continual "weeding" of birds going out of production will help to reduce mortality losses and save precious feed at the same time.

It's well to check up on the care and management of your flock to make sure they've had a chance to lay well, before passing judgment on any particular bird. You'll want to make an allowance for birds that have been handicapped by faulty housing, feeding, exposure to disease, parasites or irregularity in management.

Alp points out that poultry, like people, exhibit certain general characteristics that classify them, and a good layer is no exception. Apparently a contented bird is one of the general characteristics. Others include a good worker, always active and not a "roost sitter," a hearty eater--although unfortunately this characteristic is not restricted to the good layer, and usually a friendly individual and not too nervous. This is a quality worth developing in any strain.

(1:00) Here's a word to the wise farm machinery owner.

You know, of course, that quotas on farm machinery and equipment replacement parts have been lifted and various steps have been

taken to boost the output. But, with shortages of manpower and transportation difficulties, the manufacturers can not keep every dealer or wholesale distributor supplied with a complete line of parts. Neither are they always able to supply parts on a moment's notice. They try to give prompt service on parts they make themselves, but they often run into delays on custom-made parts they get from other concerns.

If you expect to have your machinery and equipment in running order when you need it, you will have to repair it earlier than you would in normal times.

And when you go to your dealer and find he doesn't have a particular part, don't just take it for granted that he will order it for you. If you want him to order it, be sure he understands that fact.

And a final point---Order only the parts you need. The farm machinery industry will make the parts to keep farm machinery and equipment in operation. The only point is you need to repair early to make allowance for any possible delays.

(1:15) A tip about getting replacement parts for farm machinery.

The war emergency has brought out many pieces of old farm machinery that had been in the fence corner for a long time--everything from those early tractors, with the smoke stacks on the front to old-fashioned binders.

When manufacturers quit making those old models, they often laid in enough stocks of repair parts to keep the machines then in farmers' hands going for what they thought to be all-time. Then they disposed of the patterns for many of those parts. But this war emergency upset their calculations; supplies of parts for some of those

old machines are exhausted.

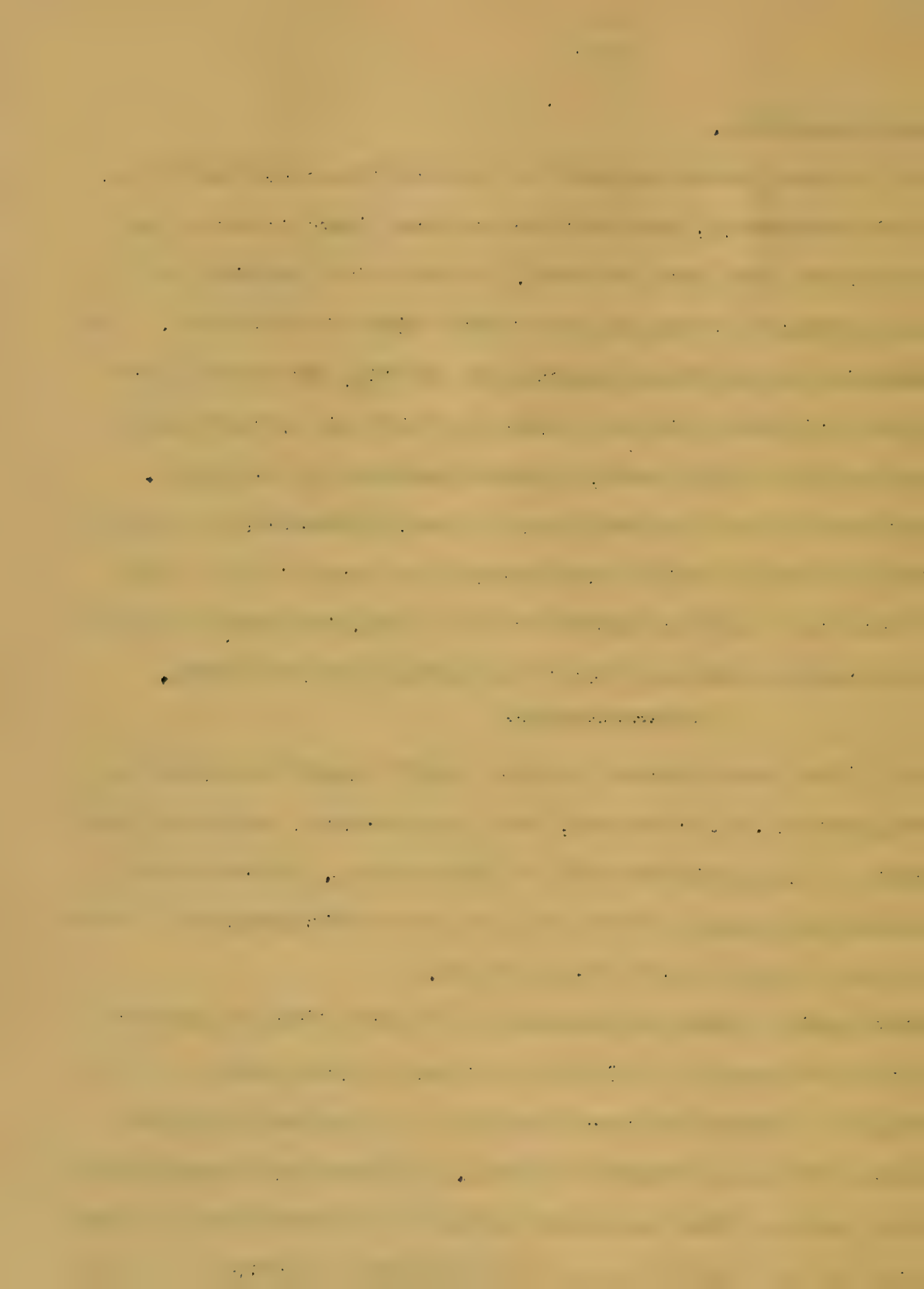
When a farmer orders a part for one of those old machines, and the supply is exhausted, the manufacturer may have to put a man on a lathe to turn out the part by hand. A part that originally cost 50 cents in mass production may now cost many times that amount. The value of the machine in the food program may justify the trouble and expense. But the rub comes when it turns out that the farmer made a mistake and ordered the wrong part, or maybe ordered it too late.

In ordering parts for machinery of any kind--and especially for old machines no longer being manufactured--be sure to give full particulars. Give not only the number of the part, but also the year and model of the machine and any other information you may have.

(:30) "The five o'clock whistle didn't blow" for Illinois farmers in 1943, says P. E. Johnston, state supervisor, emergency farm labor, University of Illinois College of Agriculture. Records show that farm operators averaged a 75-to 80-hour week this year, while their hired help only had a mere 65-to 70-hour week.

In furthering their willingness to do more than their share for the war effort, thousands of Illinois farmers, farm boys and farm hands are moving into other war work now that the corn and soybean harvest is nearing the end, Johnston states. By previous arrangements with local draft boards, this temporary change from farm work to other war work does not affect their status with Selective Service. In the spring of 1944, this seasonal labor will again move back on the farm front so that food may continue to fight for freedom.

(:50) Commercial vegetable growers from most of the 48 states will attend the thirty-fifth annual convention of the Vegetable Growers



Association of American, which will be held on December 14 and 15 in the Sherman Hotel, Chicago. J. C. Spitler, associate director of the Illinois Agricultural Extension Service, will address the group on organization. Others attending from the University of Illinois College of Agriculture include W. A. Huelsen, chief in vegetable crops, J. P. McCollum, L. A. Somers and B. L. Weaver, from the department of horticulture.

The National Hot House Growers' Association and the Illinois State Vegetable Growers meeting will be held in conjunction with this second war conference on December 14 and 15.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
TNM:DR Acts approved by Congress May 8 and June 30, 1914
12/6/43

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NINETY-EIGHTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 5:15 minutes

December 9, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit.)

(1:00) Farmers who are trying to save the soil on their farms probably can appreciate better than most folks the conservation side of the program to collect scrap metal.

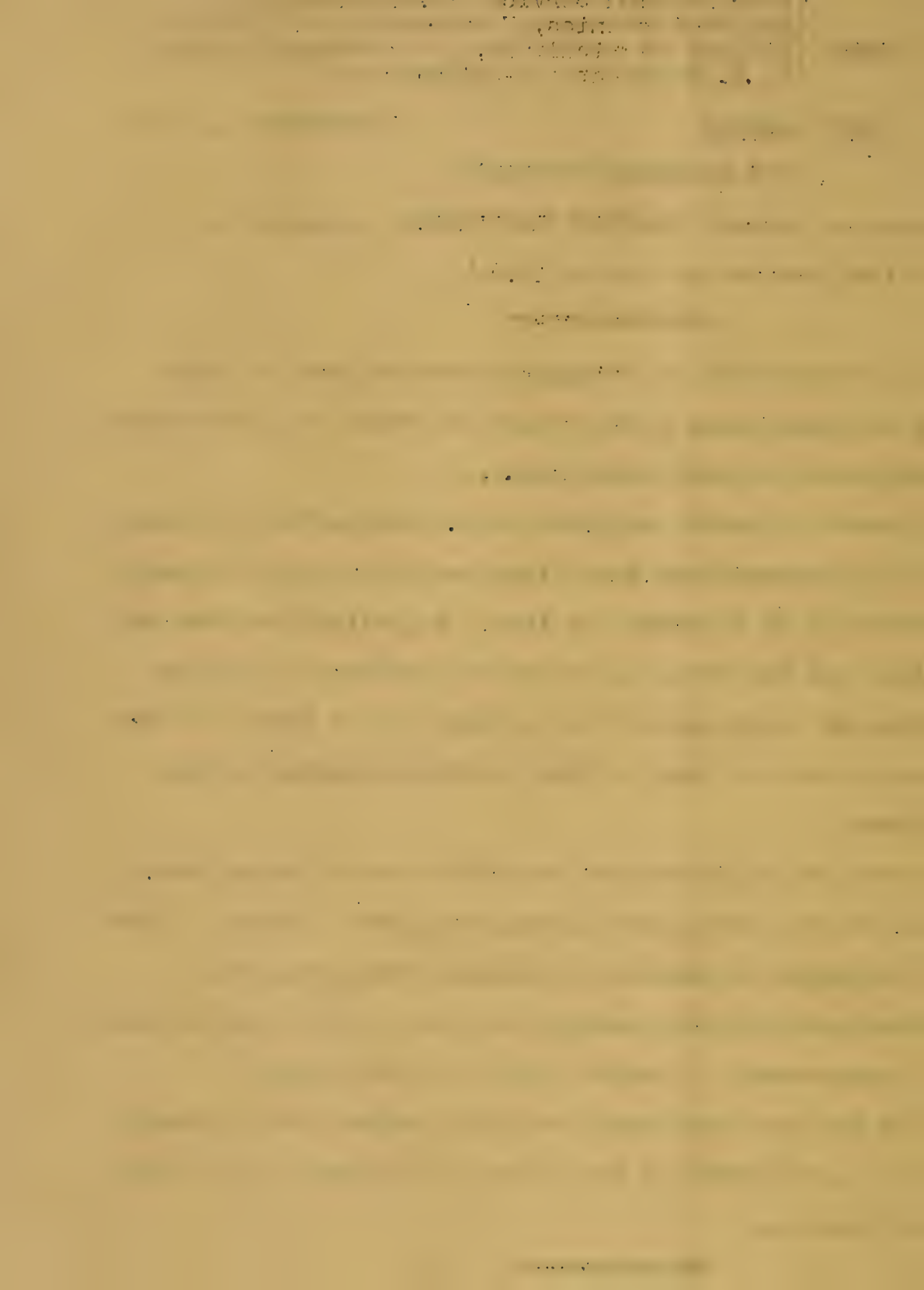
Government officials say that at the rate we're now making steel, we have only enough high grade iron ore left in this country to last us another 15 or 20 years, or less. So, aside from the fact that it will take all the scrap all of us can collect to keep the steel mills going at their present rate, every ton of scrap fed into the blast furnaces saves 2 tons of this rapidly shrinking natural resource--iron ore.

And it's not only iron ore the mills save in using scrap. In making a ton of steel from scrap metal, they save 2 tons of limestone and coke required to make steel directly from iron ore.

And another thing--by using scrap metal, the mills can make a higher-grade steel--and, of course, make it more rapidly.

So, if you have any scrap iron lying around the farm--any old machinery, or parts--take it to a scrap dealer before the roads get too bad for hauling.

(:45) Farm workers may apply to their county farm adviser for a temporary release for industrial employment now that field work cannot be done, says P. E. Johnston, state supervisor, emergency farm labor, University of Illinois College of Agriculture. Such workers



with Selective Service deferments are advised, however, to confer with their local draft boards before they seek temporary employment in other war work.

The War Manpower Commission and the Illinois Agricultural Extension Service have prepared a coordinated procedure for referral of these agricultural workers. Referred to other war work by the farm adviser through the USES office, they may be released for a definite period during slack season. Their new employer sends a form through the USES office to the farm adviser stating that the workers have been employed, that they will be released before the specified date and that workers will not be released for other non-agricultural employment.

Seasonal farm workers are urged to contact their farm adviser for placements on farms needing year-round labor or in food processing and munitions plants during the noncrop season.

(1:30) Forty-nine Lee county farmers have received temporary releases to work in the Green River Ordnance Plant, according to C. E. Yale, farm adviser. Since no housing facilities are available, the plant must depend upon labor within a radius of 25 to 35 miles. There is a complete understanding with the draft boards involved, Yale says, so that none of the group will jeopardize his draft status by a temporary change in work. This is one of the many examples in which farm workers are shifting their part in the war effort during the noncrop season.

(1:30) To meet next year's goals for soybeans, farmers are planning to plant about six acres of soybeans for every 5 acres they grew this year.

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To plant that larger acreage to good oil varieties that mature early and yield well, growers need to get busy right away lining up their supply of seed. In view of their losses from frost damage the past year, it's a good idea to give particular care to getting adapted varieties.

Soybean specialists of the University of Illinois College of Agriculture and U. S. Department of Agriculture mention a few of the varieties that have been giving good results in the northern states.

There's Richland, an early variety for the northern and central parts of the Corn Belt and for the Northeast. Richland yields well, it produces 19 to 20 per cent oil, and it matures early so a farmer can harvest it in time to plant grain. The specialists report a good supply of seed of the Richland variety.

Another good soybean variety for the northern part of the Corn Belt, including southern Michigan and Minnesota, is the Mukden-- spelled, M-u-k-d-e-n. The Mukden is an early variety, it yields well, and has about 20 per cent oil. There is a good supply of seed.

For the central Corn Belt, the specialists call attention to other good oil varieties, such as the Illini (I-l-l-i-n-i), Mingo (spelled M-i-n-g-o), Scioto (spelled S-c-i-o-t-o), Dunfield (spelled D-u-n-f-i-e-l-d) and Mandell (spelled M a n d e l l).

And, for the south central and southern parts of the Corn Belt, the specialists mention four good oil varieties: the Patoka (spelled P-a-t-o-k-a), the Gibson (spelled G-i-b-s-o-n), the Chief (spelled C-h-i-e-f) and the Boone (spelled B-o-o-n-e).

You can probably get enough seed of those or other good soybean varieties if you put in your order right away.

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(1:30) As you probably have heard, the amount of fertilizer distributed for use next spring will make a magic contribution to the food programs.

War Food officials give us a general idea of how this fertilizer can be used to do the most toward boosting production of war crops.

Again next year--just as this year--the War Food Administration has listed a number of so-called "A" crops that get first call on fertilizer supplies. The "A" list for 1944 includes hybrid corn and sugar beets for seed--also peanuts, dry edible peas, dry beans and hemp. Among the truck crops, the "A" list takes in snap beans, lima beans and green peas--cabbage, carrots and onions--Irish and sweet potatoes--tomatoes, sweet corn for processing, and vegetable seeds. On these "A" crops, a grower can use up to the amounts of fertilizer recommended by his state agricultural experiment station. In some places, especially in the commercial truck regions, farmers already are applying as much fertilizer as their crops can use. In some other regions, farmers could boost production next year by fertilizing the "A" crops at a somewhat heavier rate than in the past.

After dealers have taken care of the "A" crops, growers of other crops--that is "B" crops--get what is left. The regulations for 1944 allow these growers to get fertilizer even though they have not used it before. For "B" crops, farmers can use the usual amounts of fertilizer for their community as long as they do not apply more than the state experiment station recommends.

With more fertilizer available for "A" crops--as well as for certain other crops in some regions--the War Food officials think many farmers can boost production in spite of less labor and machinery. One other thing--they urge that fertilizers be ordered early. That means now.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

TNM:CG
12-9-43

L V KEPLER
IN CHARGE OF PERIODICALS
UNIVERSITY LIBRARY

Speaking time: 5 minutes

December 13, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a
public service for your use as you see fit.)

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(1:30) This year, of course, only a limited amount of new
electrical equipment will be available. But there is no limit on
homemade equipment constructed from noncritical materials. In fact
farmers in a good many communities can get homemade equipment at cost
from high school shop and vocational agriculture classes.

The rural electrification specialists of the U. S. Depart-
ment of Agriculture report a number of schools, working with their
rural electric cooperatives, have made construction of electric pro-
duction equipment a regular shop project. The cooperatives, through
the REA and the Extension Service of the University of Illinois College
of Agriculture, provide detailed plans for building electric pig brood-
ers, chick brooders, portable motor mounts, electric dehydrators, egg
coolers and similar devices. In addition, they help distribute the
completed equipment to farmers, displaying it in their offices and
listing it for sale in their monthly newsletters.

For example, at Petersburg, Illinois, building homemade
electric equipment has been a regular part of the vocational agricul-
ture work in the community high school for the past three years.
Plans have been provided by the REA-financed Menard Electric Coopera-
tive which sells the school-built equipment to its members at cost.
The Future Farmers of America have helped by advancing money for
materials until the equipment has been made and sold.

Benefits from such school projects work two ways. Students
get practical experience in handling tools and building real farm

1. The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations (1) for arbitrary values of the parameters α and β .

2. The second part of the paper is devoted to a detailed analysis of the case when the parameters α and β are equal to zero.

3. The third part of the paper is devoted to a detailed analysis of the case when the parameters α and β are equal to one.

4. The fourth part of the paper is devoted to a detailed analysis of the case when the parameters α and β are equal to two.

5. REFERENCES

1. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

2. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

3. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

4. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

5. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

6. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

7. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

8. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

9. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

10. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

11. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

12. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

13. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

14. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

15. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

16. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

17. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

18. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

19. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

20. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

21. A. M. Ljapunov, *Problème général de la stabilité du mouvement*, Ann. Chem. Phys., **3**, 375 (1892).

equipment. At the same time, farmers who may lack the tools, time or skill to build their own equipment can buy it at cost.

(1:30) In carrying out plans for an all-time record crop production next year, farmers will have the help of the biggest supply of fertilizer in the nation's history.

With less farm labor and machinery available, war food officials think more fertilizer offers one of the chief opportunities to boost food and feed production on the present acreage of crop land.

Although total supplies of fertilizer are larger, the situation varies with the three main fertilizer materials--nitrogen, phosphate and potash.

First, the nitrogen supply. In view of the great needs for livestock feed, farmers will get less of the organic nitrogen materials such as cottonseed meal. But, with about one-third more chemical nitrogen in prospect next year, farmers will have more nitrogen fertilizers than ever before.

They will also have more superphosphate--probably about one-fifth more than this year.

But they will have to get along with a little less potash--although they will still have considerably more potash than they did in the years just before the war.

Even with the increased total supplies of the three main fertilizers, some farmers may not get all they would like to have. But, war food officials say that, with efficient use of fertilizer, farmers will have enough fertilizer to meet all war crop needs.

But just one suggestion. In order to distribute the larger supplies of fertilizer for next year, manufacturers need the help of farmers in ordering and accepting delivery early to spread their distribution season, to use their limited storage houses and level out the transportation peaks. So order your 1944 fertilizer now.

(2:00) All things considered, farmers did a wonderful job this year. What's more, if they can get the machinery, and supplies and labor, they think they can do an even better job next year. They plan to plant more land in food and other war crops. To do that, many farmers will have to make considerable change in their usual farming practices. Naturally, some wonder what may happen to their new plans after the war.

Well, we get a little light on that question from the fact the United Nations have already set up a Relief and Rehabilitation Administration. That organization is moving ahead on the idea that the hungry people in the occupied countries will need food as soon as they are released and immediately after the war as the first step in getting back on their feet. The meeting at Atlantic City showed that the need will be very great in the first year after the war. At the same time, our people here at home will probably want more meat and butter and fresh vegetables and fruits than they can get.

Economists of the U. S. Department of Agriculture say it now seems certain that for the first year or two after the fighting stops farmers in this country will have to keep up production to meet the huge demand. They will have to grow more soybeans for human food, more peanuts, more peas, cabbage, potatoes, more wheat and other grains and more milk, eggs and lean pork. And as many meat animals as we can get the forage and grain to feed.

All in all, farmers can look forward with confidence to the years immediately after the war. But when the war spending is done, when lend-lease and the demand for food for military and relief purposes slacks up--what then?

Well, on that question, too, some folks are not waiting for the time to come before they try to do something about it. You remember some months ago, the representatives of 44 United Nations met

at Hot Springs, Virginia, to talk over the common food and farm problems of the world. You remember, too, they recommended that each nation undertake to see that its own people get more and better food.

True, in America, we've always patted ourselves on the back as being the best-fed people in the world. But even in this country, the nutrition experts say only about a third of our people are really well fed. Probably another third don't get enough of all kinds of the right food for the best of health and vigor. And almost another third are downright poorly nourished. In fact, if all the people in this country were well-fed, according to present diet standards, farmers in this country would have a home-market for a lot more food--so much more they would have to put much more land to raising food crops.

But the Hot Springs conference on food and agriculture did more than just bring out the world-wide need for more food. They carried their recommendations a step further. They set up a United Nations Interim Commission on Food and Agriculture. That commission is now drawing up a plan to submit to the different governments--a plan for a permanent organization to collect the facts we need to know about food to make a practical beginning on the big problem of how to get more food to people in all countries.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture and the United States
Department of Agriculture cooperating. H. P. Rusk, Director
Acts approved by Congress May 8 and June 30, 1914

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ONE-HUNDREDTH
ILLINOIS FARM FLASH

(From Extension Service in Agriculture
(and Home Economics, University of Illinois
(College of Agriculture, in cooperation with
(U. S. Department of Agriculture

Speaking time: 6:25 minutes

December 16, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a
public service for your use as you see fit.)

THE LIBRARY
JAN 27 1944
UNIVERSITY OF ILLINOIS

(1:00) A solution to the problem of producing more eggs with less feed should mean more eggs and more profit, in the opinion of L. E. Card, chief of the poultry division, University of Illinois College of Agriculture. He points out that a 200-egg hen needs about five and one-half pounds of feed to produce a dozen eggs, while an 80 to 90 subprofit hen uses almost twice that much feed--10½ pounds.

So it's a good idea to get the 4-F's out of the chicken house every week or at least every month. Most people normally cull about two-thirds of their flock each year. But if it were done on a week by week or month by month basis, we wouldn't be pouring all that feed into hens from which we can expect no profit. In fact, month by month culling saves roughly a ton of feed on 100 hens each year. You know, it takes about 65 pounds of feed a year to support a five-pound hen even if she doesn't lay any eggs at all.

Of course, there are other ways of securing more eggs on less feed, Dr. Card points out. First, don't overfill feeders. Feed liberally of balanced rations, watch the protein balance, provide plenty of drinking water and keep the flock healthy and comfortable.

(1:15) "A word to the wise is sufficient." So you farm folks will do yourselves a good turn if you'll get your order in early for farm labor next year. According to P. E. Johnston, state supervisor, emergency farm labor, University of Illinois College of Agriculture, the present outlook for farm labor in 1944 is critical.

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In glancing at the farm labor report for the week ending December 10, the situation stacks up about like this. Incidentally, this report covers the situation in all Illinois counties. There are 443 openings for married men and 279 for single men for year-round work on Illinois farms. Contrast the need against what's available and we find there's only about one-fourth enough. New orders received totaled 124, with 52 farmers ordering for the first time. One hundred eighteen workers registered with farm advisers this past week. Placements totaled 38 men, two women and four boys. So much for year-round workers. Now let's look at the situation for seasonal workers.

Forty-one new orders for seasonal workers were received during the week ending December 10. Twenty-two farmers ordered for the first time. Placements during the week included 66 men, two women and forty-four boys.

That's the situation as it stands, which gives you an indication that the farm labor situation in Illinois for 1944 isn't going to be an easy one to solve. May we urge you to contact your farm adviser at an early date and make known your needs concerning farm labor in 1944.

(1:15) "Every little bit added to what you got makes just a little bit more." That's the attitude of state 4-H club leaders in the present drive to collect funds for the purchase of two ambulances. These "wheeled missions of mercy" will be presented to the armed services during the forty-third annual Farm and Home Week to be held on the University of Illinois campus, February 8, 9 and 10.

Some \$275 have been donated by 4-H club members throughout the state, according to F. H. Mynard and Mary A. McKee of the state 4-H staff, who are in charge of affairs. That's a little less than one-

tenth of the necessary amount needed. They point out that if each club member in the state would donate only one dime toward the purchase of the ambulances it, "would turn the trick."

Ray T. Nicholas, Lake county farm adviser, forwarded a fifty-dollar check to the state 4-H club office which represents a collection made at their annual 4-H club achievement meeting. M. E. Tascher, Grundy county farm adviser, likewise sent a check for twenty-two dollars. This sum represented the proceeds from a scrap drive carried on by the members of the Gardner Community 4-H Club. Members of this club voted at their last meeting that each member would get the scrap material on his own farm and turn over the proceeds to the ambulance fund.

All contributions to the 4-H club ambulance fund should be sent to F. H. Mynard at the University of Illinois, or you may mail your contributions to this station. Stamps, cash or checks will be accepted.

(1:15) There's no rainbow around the corner for the timber situation in 1944, asserts J. E. Davis, extension forester and chairman of the wartime timber marketing committee. In spite of the drastic curbs on civilian lumber use, the nation is falling short in meeting its requirements. In fact, wood has been declared the No. 1 critical war material.

The 1943 production of forest crops in Illinois won't equal that of 1942, and there are practically no stocks of lumber on hand in mill yards. Farmers have a real interest in this problem because the shortage of forest products is slowing down the production, storage and distribution of food. Since almost all the forest land in Illinois is in farm woodland, the help of farmers is urgently needed.

Farmers can help by using home-grown lumber for the maintenance of farm structures and by cutting logs, pulpwood and special products for sawmills and war industries.

It isn't enough that farmers offer trees for sale, Davis points out. Sawmill operators don't have enough laborers to run both woods crews and mill crews full time. If mills are to be kept running at anywhere near capacity, farmers must step into the labor gap for the winter season.

Many farmers can now find some spare time for woods work and some have been seeking outside work to keep farm hands busy during the off season. If you're interested, contact your farm adviser. Farmers in general may take any kind of woods or sawmill work without losing agricultural deferment status. Registrants should secure approval from the local Selective Service Board.

(1:15) Now for a few questions and answers on farm machinery. The questions come from Illinois farmers and the answers from R. C. Hay, agricultural engineer, University of Illinois College of Agriculture.

First question: Are all farm machines rationed? The answer is "no." Such things as many small machines, hand tools and items widely used like plows, harrows and cultivators aren't rationed. Naturally, if the machine isn't rationed, you may buy it.

Next: Will I be able to buy new farm machinery in 1944? Well, Hay says you'll be able to buy some. However, there just isn't enough new machinery available for everyone to buy all they need and want. The next best thing is to buy the machine you need for future use in the form of a war bond.

Third: Why can't I get all the machinery I want? First, it's a question of labor in the plants. It's also due to the fact of limitations on component parts. It may be just a cog wheel, a bearing

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or some other small part that's missing, yet an otherwise complete machine cannot be released until that missing part has been supplied.

Finally: Will I be able to get repair parts this year? The answer is "yes" with restrictions and delays. The inventory supply of repair parts is low. So brother, I'd order early and avoid any long delay. Check over your machinery right now. If you need any repair parts, order them right away.

(:25) Servicing running machinery is a good start to a bad finish. So how about stopping the engine before you grease the squeaky wheel? You may only lose a couple of fingers the first time, but you might lose your whole hand or arm the next. At least it has happened before and it can happen again. The interest on the time you might save by oiling moving machinery parts sometimes comes pretty high. But why bother about the interest when it's the principle of the thing. Just remember that death takes no holiday with a careless man.

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of _____, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

Cooperative Extension Work in Agriculture and Home Economics:
University of Illinois College of Agriculture and the United States
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Acts approved by Congress May 8 and June 30, 1914

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ONE HUNDRED FIRST  
ILLINOIS FARM FLASH

(From Extension Service in Agriculture  
(and Home Economics, University of Illinois  
College of Agriculture, in cooperation with  
U. S. Department of Agriculture)

Speaking time: 4:40 minutes

December 20, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit.)

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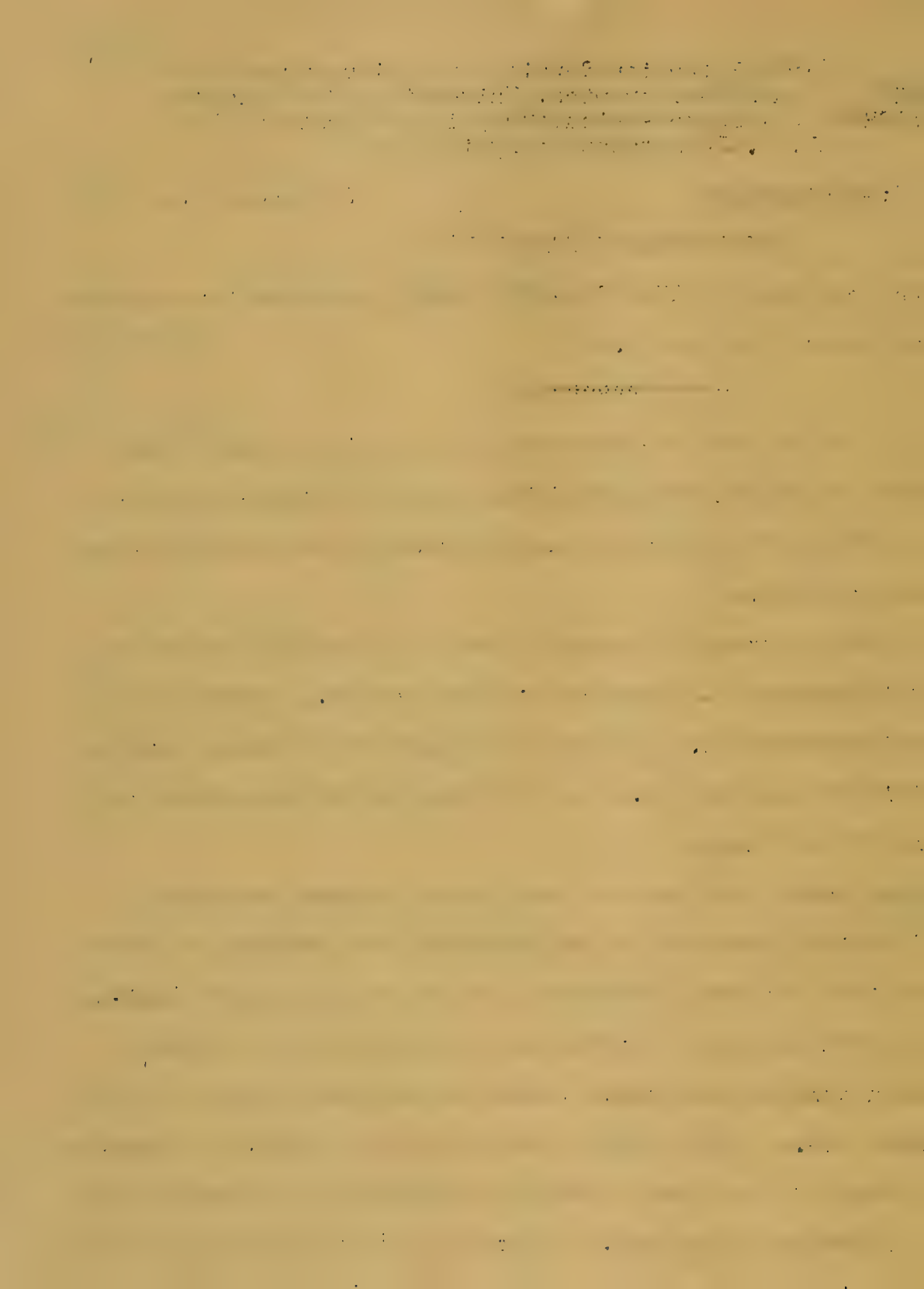
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UNIVERSITY OF ILLINOIS

(1:30) "As the sow is fed--so will be the pig," says Damon Catron, associate in animal husbandry, University of Illinois College of Agriculture. So let's glance at a good ration for self-feeding sows and gilts during gestation.

Catron says to use 30 pounds of corn, 40 pounds of oats and 30 pounds of alfalfa meal. If sows are getting too fat, increase the alfalfa meal and decrease corn. If sows are getting too thin, decrease alfalfa meal and increase the corn. A good mineral mixture should be kept before sows at all times.

Too many small pigs and too many small litters are being farrowed. The "batting average" of the American hog producer is about six and one-half pigs to each litter when it should be at least eight.

We can get more live, heavier and stronger pigs at birth by watching the ration during gestation. Sows should gain about 75 to 100 pounds during that time. Gilts should gain 80 to 125 pounds. Of course, this is to take care of the loss in weight at farrowing and during the nursing period. Pasture is valuable, but if it isn't available, plenty of good alfalfa hay in the rack is a mighty "strong live pig insurance." Proteins and minerals should be increased about 15 to 20 per cent during pregnancy, too. Feed at least a quarter of a pound of protein per head per day during the last six weeks of gestation. A new-born pig is about 16 per cent protein.



And don't forget the water. A baby pig is about 80 per cent water when it's born. Exercise, of course, is important. You might place the house at one end of the lot and feed and water at the other.

It's a good idea to start getting houses and equipment repaired and ready for spring farrowing, and then keep our eye on a good ration along with good practices to farrow large litters of strong pigs.

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(1:15) Now for some questions and answers on dairy cattle.

The questions come from Illinois farmers and the answers from W. W. Yapp, acting head of the dairy husbandry department, University of Illinois College of Agriculture.

"I have a good grade Jersey herd," states one party, "and I want to get bigger animals. I've heard I could do that by bringing in a Holstein or Swiss bull. Some of my neighbors are cross-breeding their hogs and their pigs look mighty good. Can I do this with cows?" Well, Professor Yapp says "yes, but it isn't advisable." The first cross is usually O.K. From then on the progeny is anything but uniform and desirable. Better to work toward a selection of bigger animals within the breed.

Another party writes: "I bought a Holstein cow a few months ago and yesterday she dropped a red calf. This cow had the papers with her and the man said she was well bred. I feel he misrepresented this cow and that I want to get some damages." Such a case would probably be very simply solved by the words, "case dismissed." The reason being that the characteristic for red color has been since the very beginning present in the Holstein-Friesian breed. The fact that red is recessive to black explains why it occurs but rarely. The presence of red in the calf, which occasioned this inquiry, does not mean that the animals

[illegible]



producing it are impure, and therefore the fault would not be regarded as negligence or misrepresentation on the part of the owner.

Finally, University dairymen are receiving a good many letters like this these days: "I just bought a farm and want to go into the dairy business. What breed should I have?" The best answer lies in Illinois circular 5-4-3, which is free for the asking. It discusses the merits and shortcomings of the various breeds. Circular 543 is available for free distribution by addressing your request to this station. You may call for it by number, 5-4-3.

\*\*\*\*\*

(1:00) "Enclosed is a check for \$12.50. This is our contribution to the ambulance fund," writes Miss Helen Bennett, Montgomery county home adviser, to the state 4-H club office. It's contributions like this that put Illinois 4-H clubs one step nearer their goal of purchasing two ambulances to be presented to the armed forces during the forty-third annual farm and home week, February 8, 9 and 10.

Incidentally, Miss Bennett adds a note of interest concerning \$8.50 of the contribution. It came from the True-Blue 4-H Club, which is not active now. Since the girls who were members have either been married or have gone away from home to work, they thought this was one of the best funds to which to contribute the amount left in the treasury.

"We hope that every club member in Illinois will be able to contribute at least ten cents toward the ambulance fund, state F. H. Mynard and Mary McKee of the 4-H staff, in charge of the affair. Illinois 4-H club members have already given one ambulance. But they'd like to present two more to show their appreciation and patriotism to 4-H boys and girls in the service.

All contributions toward the ambulance fund are to be mailed to F. H. Mynard at the University of Illinois, Urbana, or to this





station. However, your farm adviser and home adviser will also be glad to accept contributions.

\*\*\*\*\*

(:70) Now is the time for all good men to come to the aid of their broken-down corn planter, tractor, gang plow or combine, says R. C. Hay, agricultural engineer, University of Illinois College of Agriculture. He suggests that we order all repair parts needed and fix up those machines or arrange for the dealer to make the necessary repairs. It's a wise move, too, to learn all we can about proper operation and care of machines from instruction books, educational circulars and schools for operators. Your farm adviser, vocational agriculture teacher or implement dealer can give you further information about these schools.

\*\*\*\*\*

(:25) One of the nine ways for a man to kill himself around a building is to operate a gas engine behind closed doors. On these cold mornings when we're interested in warming up the motor, push the car outside before you start it or open the doors and windows. Tying a handkerchief around your mouth and nose as a protective mask against the carbon monoxide fumes won't work. Furthermore by the time you're able to detect a slight sweet odor from the deadly "white damp," it's too late. So let's not build our own gas chamber right in our garage.

\*\*\*\*\*

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of \_\_\_\_\_, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

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Cooperative Extension Work in Agriculture and Home Economics:  
University of Illinois College of Agriculture and the United States  
Department of Agriculture cooperating. E. F. Rusk, Director  
Acts approved by Congress May 8 and June 30, 1914

H C W CASE  
305 NEW AGR

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ONE-HUNDRED SECOND (From Extension Service in Agriculture  
ILLINOIS FARM FLASH (and Home Economics, University of Illinois  
(College of Agriculture, in cooperation with  
(U. S. Department of Agriculture

Speaking time: 5:40 minutes

December 23, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a public service for your use as you see fit.)

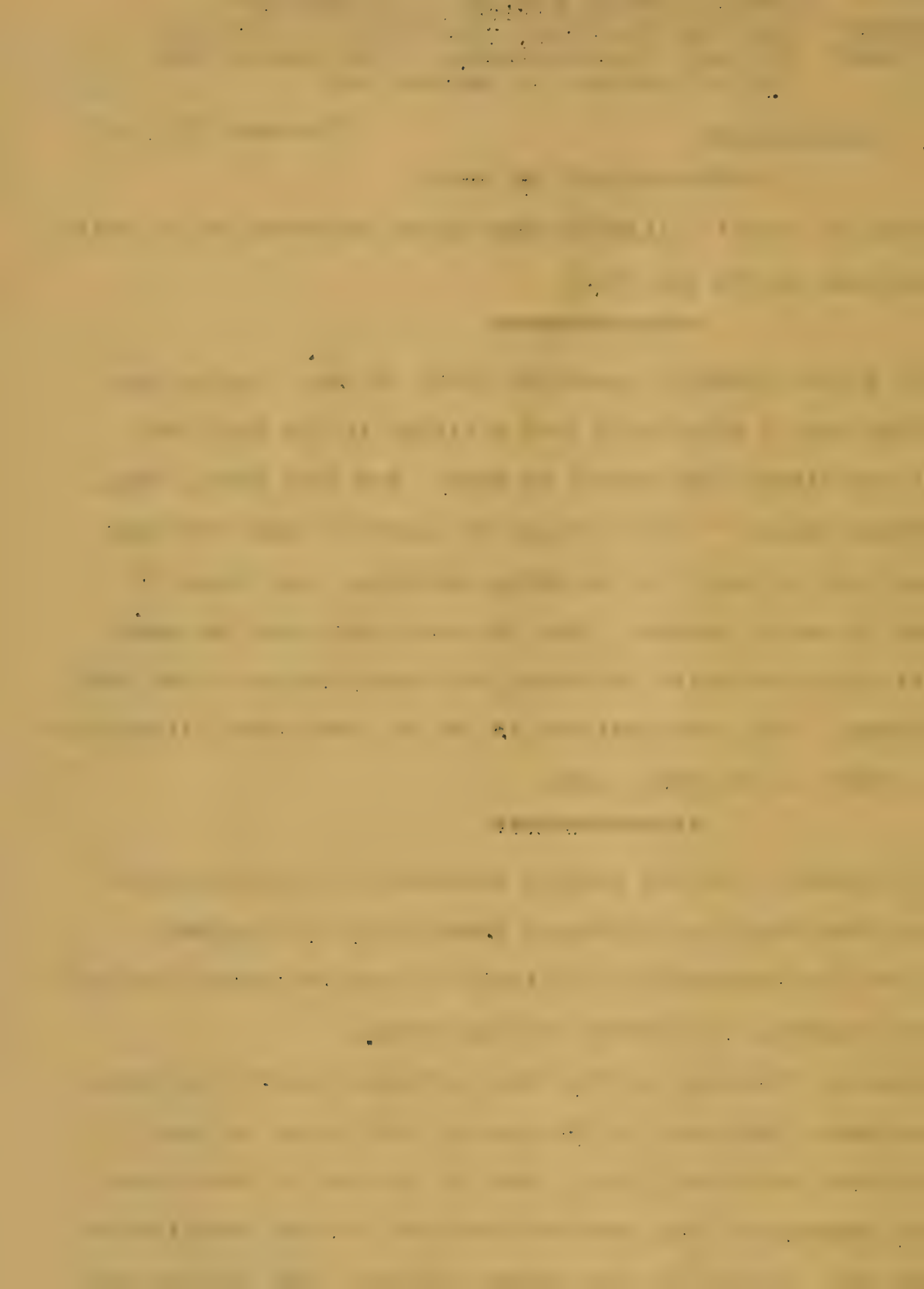
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(:25) You've probably heard the story of how a farmer was demonstrating the way in which he'd lost a finger in the buzz saw. "I just got it too close, like this," he said. And then added, "Wup, there goes another finger." You'd really be surprised just how many times a man has lost a finger or two while servicing some piece of machinery while it was in motion. Then the very next year the same man has lost his hand or entire arm doing the same thing with the same piece of machinery. It's poor business to try to prove that "lightning" doesn't strike twice in the same place.

\*\*\*\*\*

(:45) Speakers for the general sessions of the forty-third annual Farm and Home Week were announced today by R. R. Hudelson, assistant dean of the University of Illinois College of Agriculture and chairman of the committee on affairs for the event.

On Tuesday, February 8, Dr. John H. Kolb, head of the rural sociology department, University of Wisconsin, will speak on some phase of the outlook for rural youth. Paul G. Hoffman of South Bend, Indiana, who is chairman of the board of trustees for the committee of economic development, will be the Wednesday speaker. Mr. Hoffman will address the group on "Productivity--The Key to the Maintenance of Freedom." On Thursday, February 10, Miss Jessie Harris, president of the American Home Economics Association and now connected with the nutrition division of the War Food Administration, will discuss aspects of foods and nutrition.





Everyone is cordially invited to attend the forty-third annual Farm and Home Week on the campus of the University of Illinois on February 8, 9 and 10, 1944.

\*\*\*\*\*

(1:00) No one would deliberately pour 345 million pounds of milk a year down the sewer. That's enough to give everyone in the city of Chicago a glass of milk/<sup>a day</sup>for the next six months. Yet it represents the annual loss in milk production right here in our own state of Illinois as a result of mastitis. Yes, sir-----just the wasted efforts of a mere 68,000 cows.

You know, mastitis is an inflammation of the udder. About 10 per cent of it is caused by bruises. The rest of it's caused by bacteria. Its presence often isn't recognized by the owner until production begins to fail.

Mastitis can be controlled. I might not be able to control it in my herd--even if I had some cows--but you and I working with your neighbor and my neighbor and their neighbors could give mastitis a terrific setback in our own community. Along with the help of a qualified veterinarian and the laboratory of the department of animal pathology and hygiene, University of Illinois College of Agriculture, cooperating with the State Department of Agriculture, we'd really have a hopeful approach to the successful suppression of mastitis, which is really sabotaging the dairymen's part in this war effort.

Leaflet APH 22 gives an outline for the control of mastitis. If you're interested in receiving a free copy, address your request to this station. Just ask for the leaflet APH-2-2.

\*\*\*\*\*

(1:00) Brucellosis and baby pig disease are the "twins of disaster" to the swine grower at farrowing time, in the opinion of

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the veterinarians of the department of animal pathology and hygiene, University of Illinois College of Agriculture. And until healthy sows and boars are selected for breeding purposes and brood sows are properly fed during pregnancy, brucellosis and baby pig disease will continue to take a heavy toll.

Sows and boars are often infected with brucellosis even though they show no outward symptoms. The first symptom observed is usually abortion, that is, premature birth of the litter. Such pigs are often dead at birth or so weak they fail to survive. The only satisfactory way to avoid losses of this nature is to test the breeding stock for evidence of brucellosis.

Besides recognizing the relation of healthy breeding stock to the prevention of pig losses, many successful swine producers haven't overlooked the benefits derived from careful attention to feeding and management of brood sows during pregnancy and at farrowing time. It reduces losses of newborn litters from baby pig disease. Pregnant gilts and sows should be fed balanced rations if this trouble is to be avoided.

\*\*\*\*\*

(1:00) Here are a few answers to your questions on farm buildings, courtesy of D. G. Carter, professor of farm structures, University of Illinois College of Agriculture.

What farm buildings may I construct without a permit? Well, if the estimated construction doesn't cost more than \$1,000 for one farm for all buildings in one year, you don't need a permit. Incidentally, the farm house is now classified as a farm building. The estimated cost must include all new materials, paid labor and contractor's fee. Any used materials or fixtures or unpaid family labor is not counted in the cost.





May I make repairs on my buildings without a permit? The answer is "yes." No permit is required for the maintenance and repair necessary to keep buildings in sound working condition.

Are there any other building needs which I can take care of without a permit? You may buy insulation for buildings, storm doors and windows and weather stripping. You may also purchase feeders, small hog houses, brooder houses and similar movable equipment.

What procedure is necessary for building when a permit is required? Carter says for any farm construction of this nature, get an application form from your county war board or from a local lumber yard. Fill it out and file it with war board.

\*\*\*\*\*

(:45) Do your "farm labor shopping early" for 1944, says P. E. Johnston, state supervisor, emergency farm labor, University of Illinois College of Agriculture. Judging from the Illinois farm labor report for the week ending December 17, the situation isn't getting any better.

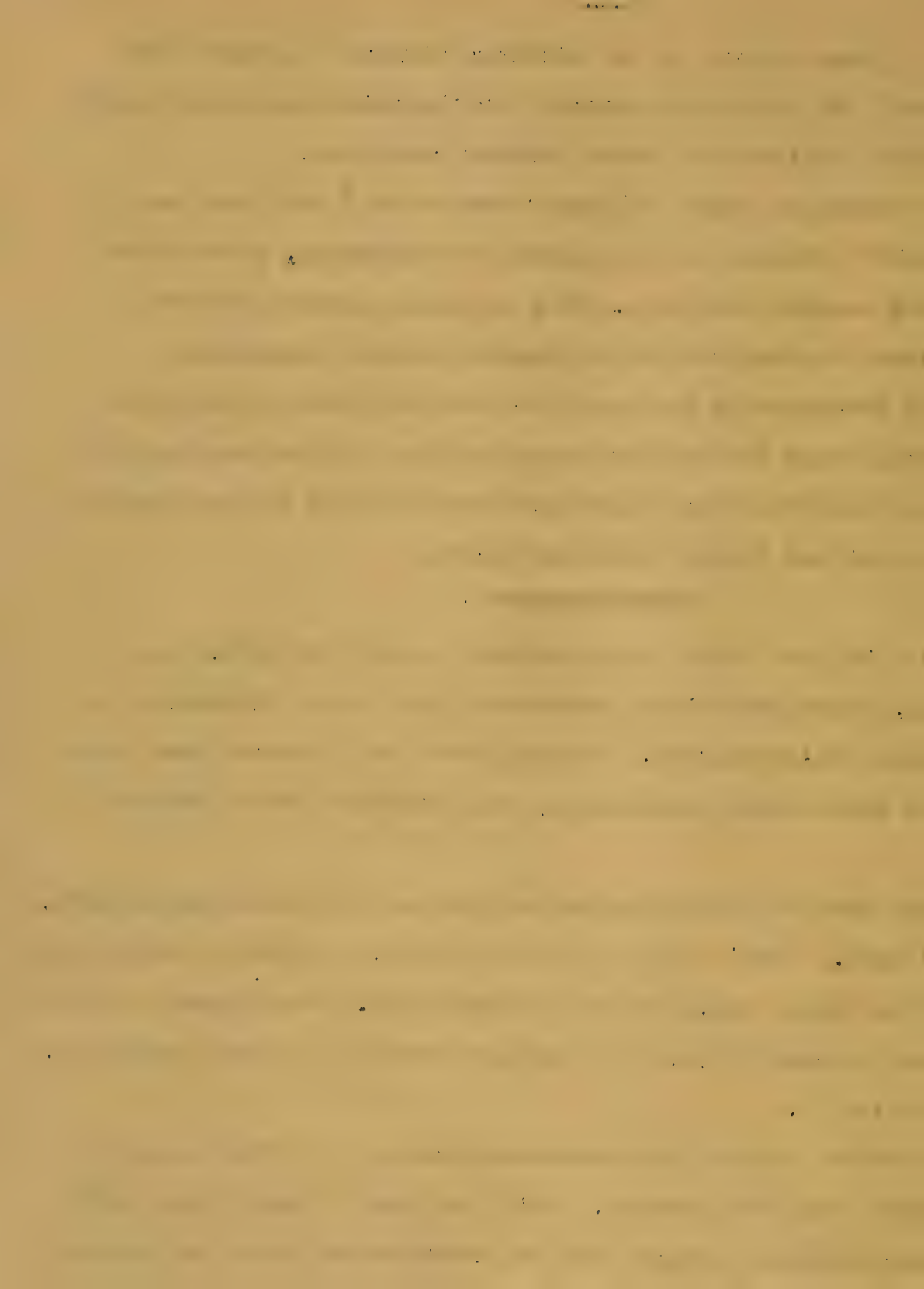
There were 441 openings for married men as year-round workers, with 104 available. That's about a fourth enough. Likewise, there were 267 openings for single men, with only 10 available. New orders received during the week totaled 115, with 81 farmers ordering for the first time. Placements totaled 77.

If you're in need of a year-round worker for 1944, keep in close touch with your farm adviser. He'll be glad to assist you with your farm labor problems so that food may continue to fight for freedom in 1944.

\*\*\*\*\*

(:45)"One down and nine to go" is the present slogan for the 4-H ambulance fund drive. You know, Illinois 4-H clubs are out to





present their second and third ambulance to the armed services during the forty-third annual Farm and Home Week at the University of Illinois College of Agriculture on February 8, 9 and 10. And of the some three thousand dollars needed, \$338 have been received.

Most recent of the contributors were the 4-H clubs of Marshall-Putnam counties. Twenty-eight clubs donated 28 dollars from their 4-H federation fund. The money was earned this past year at their county fair food stand. The 28 dollars were sent in by Mrs. Orla Kemper, Marshall-Putnam home adviser.

All contributions toward the 4-H ambulance fund, no matter how small those contributions may be, will be appreciated. Mail them to this station or to F. H. Mynard, University of Illinois, Urbana.

\*\*\*\*\*

CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of \_\_\_\_\_, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

-O-

Cooperative Extension Work in Agriculture and Home Economics:  
University of Illinois College of Agriculture and the United States  
Department of Agriculture cooperating. E. P. Rusk, Director  
Acts approved by Congress May 8 and June 30, 1914

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12-23-43

H C M CASE  
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ONE-HUNDRED THIRD  
ILLINOIS FARM FLASH

(From Extension Service in Agriculture  
(and Home Economics, University of Illinois  
(College of Agriculture, in cooperation with  
(U. S. Department of Agriculture

Speaking time: 4:50 minutes

December 27, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a  
public service for your use as you see fit.)

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JAN 27 1944  
UNIVERSITY OF ILLINOIS

(:25) Something worse could have happened than "Boomp ta da"  
when the merry-go-round broke down. We can "steal a march" from this  
popular song of a few years ago and make it a point to repair all  
machinery before it breaks down. Manufacturers have seen to it that  
cog wheels and chains just don't fly off of their own accord and crack  
somebody across the face. But chains and cog wheels must be looked at  
now and then to make certain that wear and tear might not cause some  
trouble the next time the machine is set in motion. Stop the trouble  
before it starts. Make certain that machines are repaired before  
they break down.

\*\*\*\*\*

(1:45) While most Illinois farmers prefer to supply their  
nitrogen through legumes, some will use nitrogen out of the bag. For  
those, here's some information of importance on the prospects for  
nitrogen fertilizer in 1944.

Farmers will get more nitrogen fertilizer next year than ever  
before. But they'll get more of some types of nitrogen, and a little  
less of others.

With record numbers of livestock and poultry to feed, farmers  
will get less of the animal and vegetable nitrogen fertilizer materials  
such as tankage, and cottonseed and soybean meal. But the War Food  
Administration reports that farmers will get enough more chemical  
nitrogen to more than make up the difference.

THE UNIVERSITY OF CHICAGO  
DIVISION OF THE PHYSICAL SCIENCES  
DEPARTMENT OF CHEMISTRY  
530 SOUTH EAST ASIAN AVENUE  
CHICAGO, ILLINOIS 60607

RECEIVED  
JAN 10 1964

TO: THE DIRECTOR, NATIONAL BUREAU OF STANDARDS  
WASHINGTON, D. C.

FROM: DR. J. H. GOLDSTEIN

SUBJECT: NUCLEAR MAGNETIC RESONANCE

REFERENCE: J. H. Goldstein, J. Chem. Phys. 38, 100 (1963)

ENCLOSURE

Enclosed for the Bureau are two copies of the manuscript of the paper cited above.

Very truly yours,  
J. H. Goldstein

cc: Dr. J. H. Goldstein, Department of Chemistry, University of Chicago

cc: Dr. J. H. Goldstein, National Bureau of Standards, Washington, D. C.

cc: Dr. J. H. Goldstein, National Institute of Standards and Technology, Gaithersburg, Md.

cc: Dr. J. H. Goldstein, National Institute of Standards and Technology, Boulder, Colo.

cc: Dr. J. H. Goldstein, National Institute of Standards and Technology, Springfield, Mass.

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cc: Dr. J. H. Goldstein, National Institute of Standards and Technology, Gaithersburg, Md.



This country will import pretty close to as much nitrate of soda this year as in prewar years but somewhat less than last year. Most of the nitrate of soda will go to farmers in the eastern states for top and side dressing.

To supplement the supply of nitrate of soda, the government is providing for the production of other nitrogen products, including ammonium nitrate, for fertilizer. Ammonium nitrate contains about twice as much nitrogen as nitrate of soda and offers a good economical nitrogen for mixed fertilizers. It also makes a good top and side dressing when a good mechanical condition can be maintained. Manufacturers now produce the ammonium nitrate in pellet form, coated first with a wax and then with clay, so farmers won't have trouble with it caking and taking on moisture as it used to do.

And not only will farmers get more ammonium nitrate. War Food officials report prospects of the most ammonium sulphate in history. In the Pacific Coast states, farmers apply ammonium sulphate directly to crops, but in other parts of the country the ammonium sulphate will go into mixed fertilizers.

So, while some farmers will get their nitrogen in different forms than in the past, considering all types of nitrogen taken together, they'll get the most nitrogen fertilizer in history. And they should order it now.

\*\*\*\*\*

(1:00) For the next sixty seconds we're going to talk turkey, courtesy of H. H. Alp, associate professor of poultry extension, University of Illinois College of Agriculture. He tells us that the Illinois Turkey Growers' Association will hold its annual meeting on the University campus, February 10 and 11, 1944. It will be held in conjunction with the Central States Dressed Turkey Show.



Keynoter in the array of talent to address turkey growers for their biggest and best event of the year will be Professor F. H. Margolf, Pennsylvania State College. He plans to speak to the group on feed and management for increased hatchability, pasture crops and management for turkeys and preparation of market turkeys.

Incidentally, the Illinois Turkey Growers' Association is the oldest organization of its kind in the country. George Krug of Minonk is president and Keith Chidley of Palatine is secretary.

An official premium list for the dressed turkey show as well as a detailed program for the annual meeting will be sent free on request to anyone interested. Just address your request to this station.

But remember to "chalk up" February 10 and 11 as a "must attend" on your list for future appointments. They're the dates of the Illinois Turkey Growers' Association annual meeting and the Central States Dressed Turkey Show on the University of Illinois campus in Urbana-Champaign.

\*\*\*\*\*

(1:00) Artificial lighting helps to stimulate that "spirit to lay," in the opinion of H. H. Alp, associate professor of poultry extension, University of Illinois College of Agriculture. It's especially a good practice for late pullets.

One 40-watt lamp for each 200 square feet of floor space is a more or less standard recommendation for morning and evening schedule, Alp says. So a house 20 feet square would require two 40-watt lamps.

The all-night schedule is becoming a very popular practice, however. It saves expense of automatic controls, and production results seem to be more uniform than with other lighting schedules. With this system the lights are turned on at sunset and off at sunrise.





Size and location of lights are important, especially with the morning and evening lighting schedule. For the greatest efficiency lights should be hung about halfway between the front edge of the droppings board or roosts and the front wall. The bottom edge of the reflectors should be six feet above the floor. Reflectors don't add to the amount of the light, but they certainly increase its efficiency. In general, poultry house walls aren't good reflectors of light, and for this reason it's good economy to use reflectors.

In a house 20 feet square, two 15-watt lamps are recommended when location and other details are as Alp has just mentioned.

For further information on artificial lighting in poultry houses, address your request to this station.

\*\*\*\*\*

(:45) Planting white corn next year? The demand for white corn and the premium paid for it are incentives. But----- Well, let's take a look at a few of the things on which a decision of this sort might hinge, as outlined by C. M. Woodworth, professor of plant genetics, University of Illinois College of Agriculture.

It's better to concentrate white corn in certain areas. Mixture with yellow corn can be avoided and dry corn millers would be attracted to these areas by the large amounts available. Indiscriminate planting of white corn in yellow corn areas is to be discouraged. Of course, this takes community action.

Isolated growers of white corn could be sure of a market with dry corn millers by growing enough for a carload.

White corn hybrids haven't replaced open-pollinated varieties nearly to the extent they have in yellow corn. However, it would be well to check on the best hybrids for your territory to make sure



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you're taking advantage of the latest improvements. Your farm adviser can give you some good information on that score.

There are no white corn hybrids with an outstanding resistance to corn borer. Preference, therefore, should be given to early white hybrids and the practice of delayed planting should be followed.

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CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of \_\_\_\_\_, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

Cooperative Extension Work in Agriculture and Home Economics:  
University of Illinois College of Agriculture and the United States  
Department of Agriculture cooperating. H. P. Rusk, Director  
Acts approved by Congress May 8 and June 30, 1914

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ONE HUNDRED FOURTH  
ILLINOIS FARM FLASH

(From Extension Service in Agriculture  
(and Home Economics, University of Illinois  
(College of Agriculture, in cooperation with  
(U. S. Department of Agriculture

Speaking time: 4 minutes

December 30, 1943

(FOR BROADCAST USE ONLY)

(ANNOUNCER: Here is today's ILLINOIS FARM FLASH, presented as a  
public service for your use as you see fit.)

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(:30) Here are a few of the ways we can keep things from  
going to blazes around our house in 1944. See that no curtains, wall-  
paper, woodwork or rubbish is too near a stove, fireplace or furnace.  
Let's also see to it that stoves don't become overheated. Starting a  
fire with kerosene in the kitchen stove oftentimes starts a fire in  
the whole house, the garage, barn and the rest of the farm buildings.  
If you think we were careful a year ago, how can we explain that we  
burned up a "cool" 80 million dollars worth of farm property----in a  
crucial war year, too. The state committee on rural farm and home  
safety, University of Illinois College of Agriculture reminds us that  
the danger of fires goes up as the temperature goes down.

\*\*\*\*\*

(1:00) "Don't go off the deep end," says the department of  
animal pathology and hygiene, University of Illinois College of Agri-  
culture, "in planning control of Bang's disease." The department has  
followed up this "don't" with twenty-three others in leaflet APH136.  
It's free for the asking. Address your request to this station.

Each herd is a separate problem when it comes to this matter  
of determining the advantages and disadvantages of the various methods  
of controlling Bang's disease or brucellosis. The best plan for an  
infected herd may not be the one you'd apply to a clean herd. But the  
two dozen "don'ts" listed in APH 1-3-6 cover all the angles.

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF THE HISTORY OF ARTS  
AND ARCHITECTURE  
CHICAGO, ILLINOIS 60637

OFFICE OF THE DEAN OF THE FACULTY OF ARTS  
CHICAGO, ILLINOIS 60637

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There's a human factor involved, too, in this matter of controlling Bang's disease. It says here in APH 1-3-6, "Don't use raw milk or raw milk products from infected cows," and "don't allow any veterinarian to test your herd without first answering questions you wish to have answered concerning this disease." You know, man is susceptible to the cattle, swine and goat type of brucellosis. In man, however, the disease is known as undulant fever.

Remember that leaflet APH 1-3-6, concerning two dozen "don'ts" on Bang's disease, is free for the asking. Address your request to this station.

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(1:00) Potash deficiency, especially in southern Illinois soils, may hinder the 1944 food production program, in the opinion of C. M. Linsley, assistant professor of soils extension, University of Illinois College of Agriculture. With short supplies of muriate of potash as well as mixed fertilizers high in potash, he is urging Illinois farmers who need potash to order early and at the same time conserve the present potash supply in the soil.

One of the practical things we can do to conserve the potash supply is to plow under stalks and straw or return them to the soil in the form of manure, Linsley points out. In fact, three-fourths of the potassium removed from the soil is left in the stalks and straw. Where these crops are fed, about 9/10 of the potassium is voided in the manure. By using plenty of bedding to save the liquid manure and by keeping the manure under cover until it's spread on the land, we'll save most of this valuable potassium as well as other fertility elements.

We can't afford to wait until potash starvation symptoms show up. If we do, we've waited 10 years too long. Your farm adviser



can help you with directions for collecting soil samples and arranging for the potassium test. This service is free to all farmers. However, another practical way to test for potash deficiency is to buy a bag of muriate of potash and try out 100 pounds on a half acre of corn.

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(1:30) When you order nitrogen for next year's crops, you may not get all the nitrate of soda you would like to have, even though it is about what you received a year ago. But you can round out your requirements with other types of nitrogen, especially ammonium nitrate.

You'll find ammonium nitrate now on the market is a big improvement over the kind you bought this spring. In the light of this year's difficulties in storing and distributing ammonium nitrate, the fertilizer industry has developed a method of putting up ammonium nitrate in the form of pellets, coated with wax and clay. The coatings of wax and clay tend to keep the fertilizer from taking up moisture and caking. It will work all right in fertilizer distributing machinery. Fertilizer specialists of the University of Illinois College of Agriculture and United States Department of Agriculture aren't yet ready to say just how long the new type of ammonium nitrate will store satisfactorily. But you can keep it at least three months. Until they know more about it, they suggest farmers time their orders for ammonium nitrate so they can apply it within one or two months after they get it.

The fertilizer men offer these further suggestions about this new type of ammonium nitrate:

Since it is a concentrated material, you will find it easier to distribute if you put it on crops that you fertilize fairly heavily.

Put on about half as much ammonium nitrate as you do nitrate of soda.



In using ammonium nitrate on crops, apply the fertilizer when the foliage is dry so it won't stick to the foliage.

The fertilizer men recommend ammonium nitrate especially for fruit trees such as apples, peaches and cherries.

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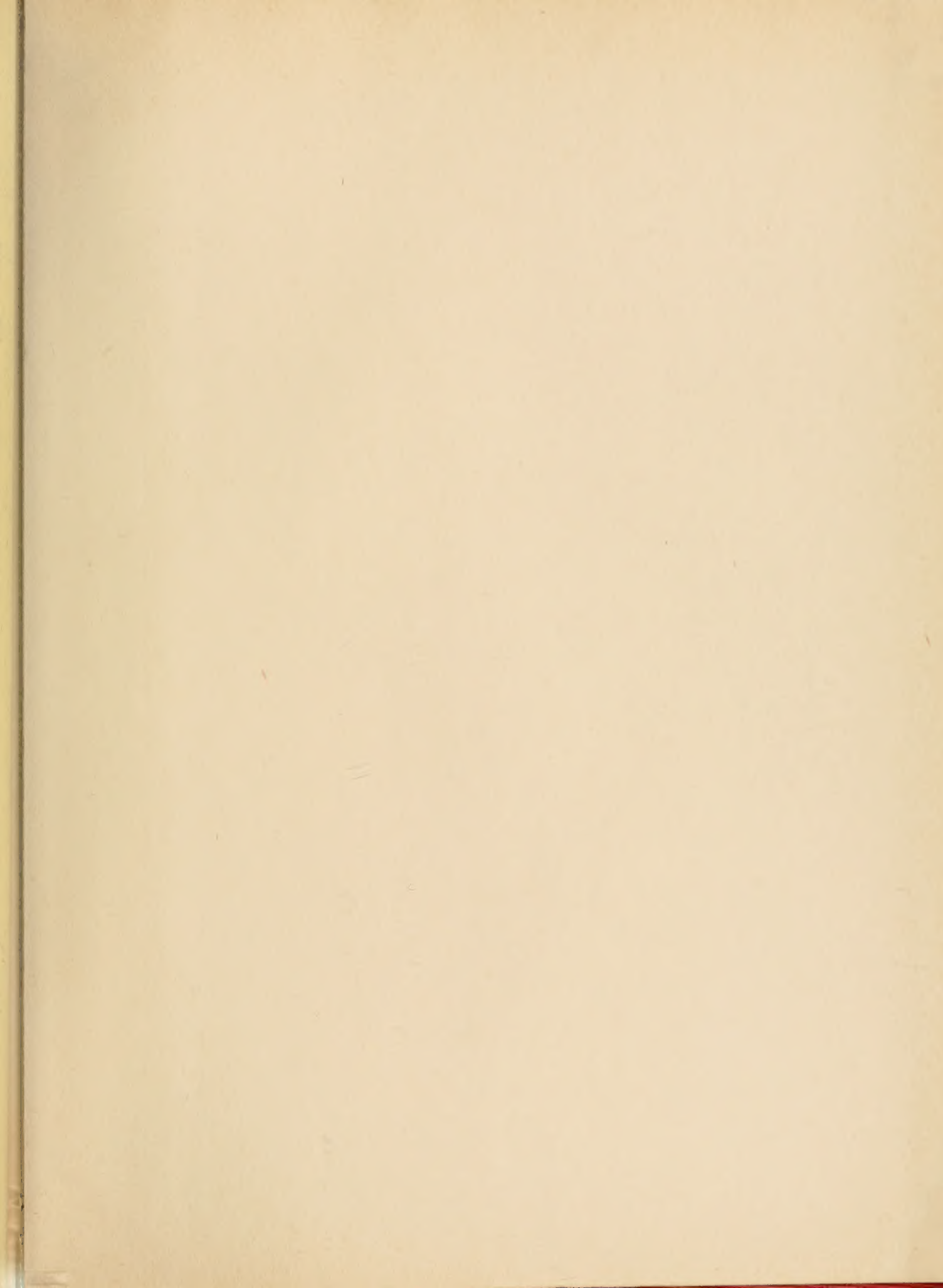
CLOSING ANNOUNCEMENT: And so ends another ILLINOIS FARM FLASH, a public service of \_\_\_\_\_, presented in cooperation with the United States Department of Agriculture and the College of Agriculture, University of Illinois.

Cooperative Extension Work in Agriculture and Home Economics:  
University of Illinois College of Agriculture and the United States  
Department of Agriculture cooperating. H. P. Rusk, Director  
Acts approved by Congress May 8 and June 30, 1914

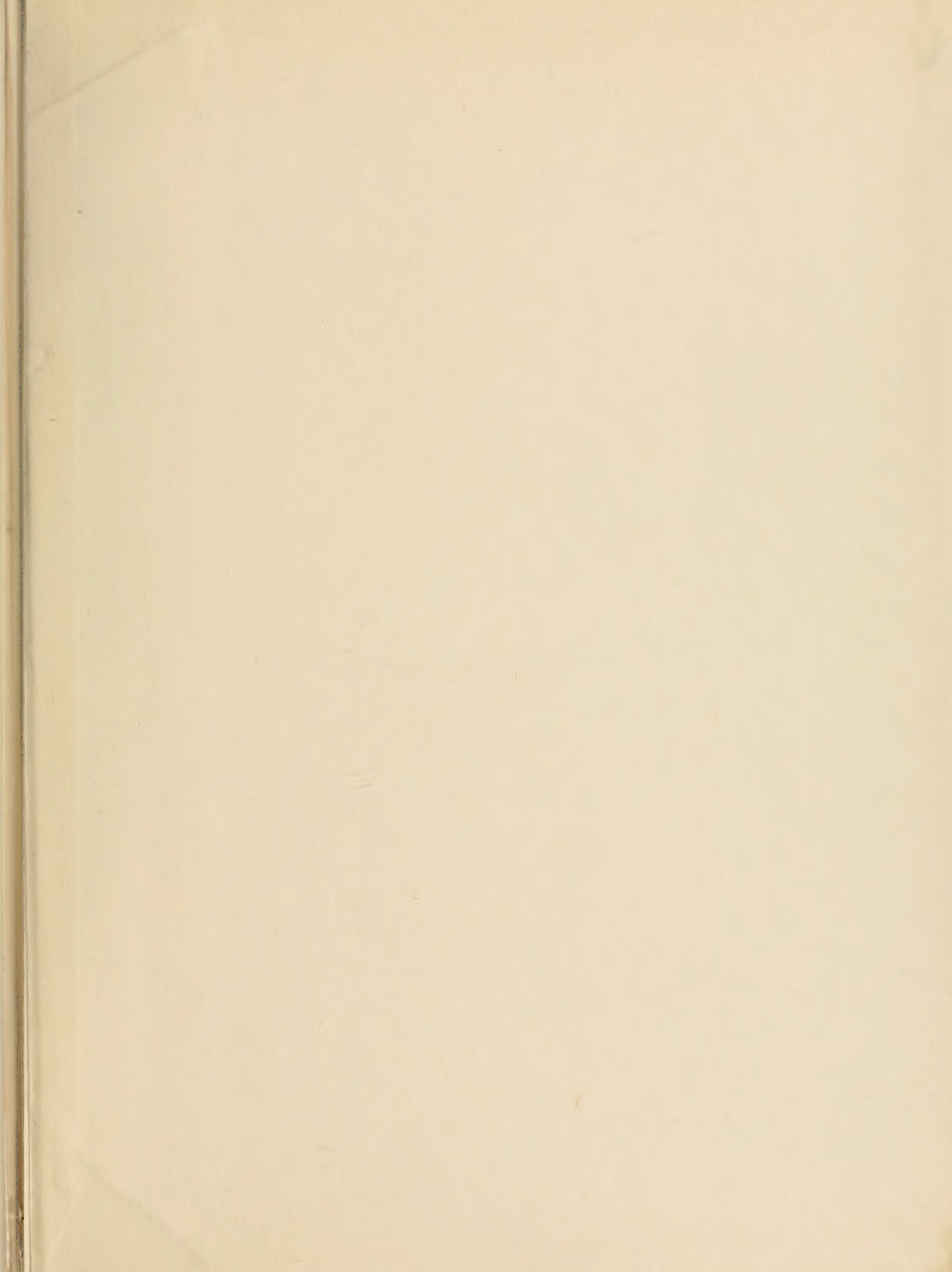


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